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A STUDY TO DETERMINE FACTORS CONTRIBUTING  
TO MEDICAL EVALUATION BOARD PROCESSING TIME  
AT THE JOINT MILITARY MEDICAL COMMAND-  
BROOKE ARMY MEDICAL CENTER

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Submitted to the Faculty of  
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of  
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## ABSTRACT

Forty-six physical disability records filed at the Physical Evaluation Board Liaison Office, Joint Military Medical Command-Brooke Army Medical Center, were reviewed to evaluate factors contributing to the processing time of medical evaluation boards. The Center's average total processing time of 59.6 days indicates a need to review the Health Services Command's established 30-day standard. Specific segments of the medical evaluation board process were identified and measured. A correlation matrix using Microstat software identified three medical evaluation board segments, T<sub>1</sub> (initiation of the medical board), T<sub>2</sub> (physical examination), and T<sub>5</sub>-Total (Physical Evaluation Board Liaison Office segment) that correlated well with the facility's total medical evaluation board time. The high correlations of these segments indicate that efforts at reducing total medical evaluation board processing time should be directed at physicians who initiate the process and at the Physical Evaluation Board Liaison Office.

## TABLE OF CONTENTS

ACKNOWLEDGMENTS.....	ii
ABSTRACT.....	iii
CHAPTER	
I. INTRODUCTION.....	1
Conditions Which Prompted the Study.....	1
Problem Statement.....	4
Literature Review.....	4
a. Physical Disability Evaluation System.....	4
(1) Principal Commands Involved in PDES.....	5
(2) Review Boards.....	5
(3) Medical Evaluation Boards.....	7
(4) Physical Evaluation Board Liaison Officer.....	9
(5) U.S. Army Physical Disability Agency.....	9
b. Physical Disability Evaluation Process.....	10
(1) Objectives of PDES.....	10
(2) Physical Disability Process.....	12
(3) Pre-medical Evaluation Board Phase.....	14
(4) Initiation of a Medical Evaluation Board.....	16
(5) Prerequisites Prior to Disability Processing..	16
(6) Medical Evaluation Board Phase.....	17
(7) Physical Evaluation Board Liaison Officer.....	28
(8) Physical Evaluation Board Phase.....	29
(9) Disability Review Council and Appeals Process.	32
c. Problems with the Physical Disability Evaluation System.....	33
Purpose of the Study.....	37
II. METHOD AND PROCEDURES.....	37
Records Reviewed.....	37
Ethical Considerations.....	39
Procedure.....	40
a. Operational Definitions.....	44
b. Working Hypothesis.....	44
Statistical Methods.....	44
III. RESULTS.....	45
Raw Data.....	45
Demographic Data.....	45
Descriptive Data.....	53
Statistical Analysis.....	63

IV. DISCUSSION .....	69
V. CONCLUSIONS AND RECOMMENDATIONS.....	74
VI. REFERENCES.....	77

#### LIST OF FIGURES

Fig. 1. Principle Agencies involved in processing disability cases.....	6
Fig. 2. Physical Disability Evaluation system and related review boards.....	8
Fig. 3. Location of Physical Evaluation Boards (PEBs) and areas serviced.....	11
Fig. 4. Physical Disability Evaluation Process.....	13
Fig. 5. DD Form 689 (Individual Sick slip).....	18
Fig. 6. DA Forms 2 AND 2-1 (Personnel Qualification Record).....	19
Fig. 7. DD Form 261 (Report of Investigation-Line of Duty and Misconduct Status).....	20
Fig. 8. DA Form 3349 (Physical Profile).....	21
Fig. 9. SF 93 (Report of Medical History).....	22
Fig. 10. SF 88 (Report of Medical Examination).....	23
Fig. 11. SF 502 (Clinical Record-Narrative Summary).....	24
Fig. 12. DA Form 3947 (Medical Evaluation Proceedings).....	27
Fig. 13. DA Form 199 (Physical Evaluation Board Proceedings).....	31
Fig. 14. PEBLO Control Card (BAMC).....	38
Fig. 15. Medical Evaluation Board Study Sheet.....	42
Fig. 16. Graph of Total MEBD Processing Time Per Clinical Service.....	66
Fig. 17. Graph of Average MEBD Processing Time per Clinical Service.....	67

#### LIST OF TABLES

Table 1. Raw Data from MEBD Study .....	46
Table 2. Demographic Data from MEBD cases.....	52
Table 3. Primary Military Occupational Specialty.....	54
Table 4. Primary Diagnoses.....	56
Table 5. Existed Prior to Service Diagnoses.....	60
Table 6. Descriptive Data.....	61
Table 7. Major Clinical Services Processing MEBDs.....	65
Table 8. Correlation Matrix.....	68

#### APPENDIX

A. Abbreviations.....	80
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## I. Introduction

Conditions Which Prompted the Study

The Secretary of the Army (SA) is authorized to discharge or retire Army service members who are unfit for military duty because of physical disability (Title 10, United States Code, Chapter 61). Physical disability is defined as any impairment due to disease or injury, regardless of degree, which reduces or precludes an individual's actual or presumed ability to engage in gainful or normal activity (Department of Defense [DoD] Directive, 1332.18). The Army utilizes the Army Physical Disability Evaluation System (PDES) to evaluate whether a member with a medical condition or physical impairment can perform satisfactorily in his primary military occupational specialty (PMOS) (Army Regulation [AR] 635-40, AR 40-501, AR 40-3).

Physical disability processing involves three phases: (a) a medical evaluation board (MEBD) phase that determines if the member meets retention criteria in accordance to AR 40-501; (b) a physical evaluation board (PEB) phase that determines if the member is fit or unfit to perform the duties of his office, grade or rank; and (c) a personnel phase that implements the final administrative action, i.e. issuance of transition orders or other instructions in behalf of the Secretary of the Army.

Department of Defense Directive 1332.18 emphasizes the importance of providing uniform and fair consideration under applicable laws, policies and directives to all service members. Every effort is made to properly counsel each member in clearly understandable terms at every step of the process. The member has the physical disability evaluation liaison officer (PEBLO) at his disposal for advise and counseling. In addition, the member is afforded a military lawyer for legal representation at formal PEB hearings. Physical disability cases are routinely reviewed by the Disability Review Council (DRC), a staff element of the United States Army Physical Disability Agency (USAPDA) and other review agency boards.

Since the day of its inception, the physical disability system has been criticized for its slow processing and untimeliness of physical disability cases. Unnecessary delays in processing physical disability cases are costly, both from a military readiness and financial aspect. Delays in processing physical disability cases impact on military readiness because the member who is being processed through the PDES is generally not working in his PMOS and therefore is considered a "loss" to the unit. The member's unit, however, cannot request a replacement while that member is still officially part of that unit. To underscore the importance of prompt processing and timeliness of physical



disability cases, the Commander of USAPDA changed the "average processing days" to "readiness days lost" (Major General T. E. Strevey, Jr., personal communication, March 19, 1987; Brigadier General R. L. Dilworth, personal communication, March 29, 1990). With over 1200 members in the disability system at any time, Strevey equated a one-day increase in processing time to the loss of two additional battalions to the Army's force structure.

Delays in processing physical disability cases result in significant monetary loss to the government. The U.S. Army Audit Agency (AAA) recently reviewed the processing time of physical disability cases during the second quarter of fiscal year (FY) 1988 (AAA, 1989). In AAA's audit, total processing time included the date the physician identifies a member not meeting retention criteria and initiates a medical evaluation board up to the date the member is separated or retired from the service. In its review, the U.S. AAA expressed that case processing required too much time, averaging a total processing time of 150 days. Considerable delays were noted in two of the major phases of the process---the medical evaluation board phase and the personnel phase. Medical evaluation board processing required an average of 55 days, exceeding the Health Services Command's 30-day goal by 25 days. As a result of the 25-day delay, the Army incurred unnecessary costs of about \$11.3 million annually (AAA, 1989). In

addition, using FY 1988 year 1988 personnel costs and benefits and the disability case workload), the Army incurred an average of \$450,000 for each additional day these members remain on active duty status while undergoing physical disability processing (AAA, 1989).

The U.S. AAA recommended that standards should be developed to cover each phase of the process. Health Services Command's 30-day goal for medical treatment facilities should be further divided into key segments. Performance data should be obtained and compared with each standard. Comparison of time standards with actual processing time would permit *managers to see which segments* of each phase of the process are performing above or below the level expected. The comparison would also ensure the appropriate segments are being included for measurement.

#### Problem Statement

The problem of this study is to determine the underlying factors contributing to medical evaluation board processing time at the Joint Military Medical Command-Brooke Army Medical Center.

#### Literature Review

##### The Physical Disability Evaluation System

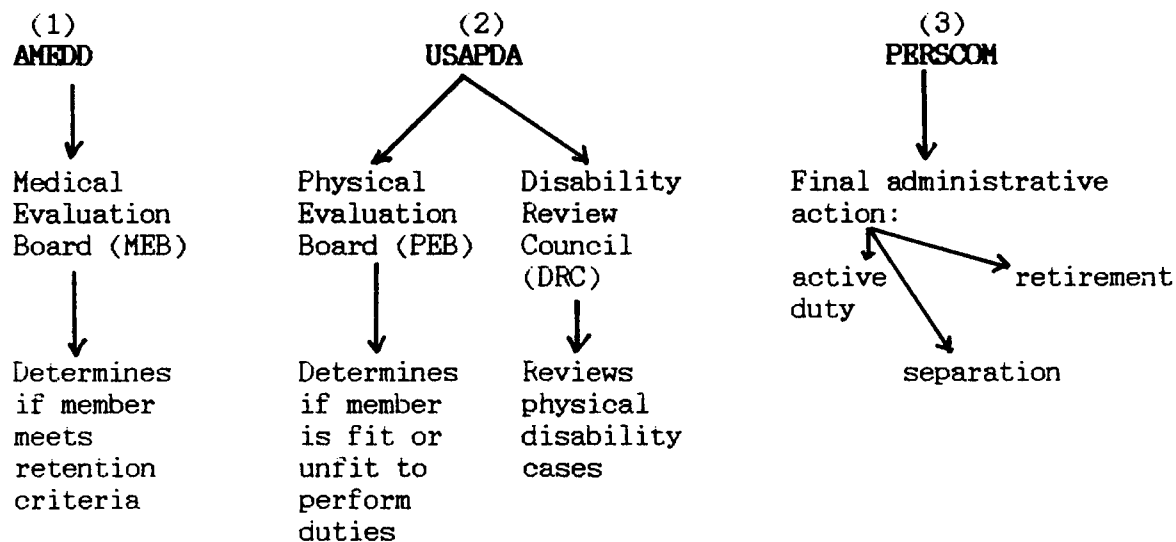
Chapter 61 of Title 10, U.S. Code authorizes the Secretary of the Army to discharge or retire soldiers who are unfit for military

duty because of physical disability. The Army PDES is a program designed to determine whether a soldier with a medical illness or physical disability should remain on active duty or be discharged or retired from the service.

Principal Commands involved in PDES. The principle commands and agency involved in processing physical disability cases include: (a) the Army Medical Department (AMEDD); (b) U.S. Army Physical Disability Agency; and (c) U.S. Total Army Personnel Command (PERSCOM) (see Figure 1). The AMEDD provides technical control over the MEBDs that determine whether a member meets retention criteria in accordance to AR 40-501. The USAPDA controls the PEBs that determine if the member is fit or unfit to perform satisfactorily the duties of his PMOS. The DRC, a staff element of the USAPDA, reviews PEB proceedings to ensure all members are given uniform and fair consideration under applicable laws, policies and directives. Finally, PERSCOM provides the final administrative action in processing physical disability cases, i.e. issuance of transition orders or other instructions in behalf of the SA.

Review Boards. Closely related to the PDES, although not technically part of it, are the Army Disability Review Board (ADRB) and the Army Board for Correction of Military Records (ABCMR)(see Figure 2). The ADRB and the ABCMR are statutory boards established by the SA (AR 635-40). The ADRB operates within the framework of

## PHYSICAL DISABILITY EVALUATION PROCESS



**Figure 1.** Principal agencies involved in processing physical disability cases.

Legend: (1) AMEDD = Army Medical Department  
(2) USAPDA = United States Army Physical Disability Agency  
(3) PERSCOM = U.S. Army Total Personnel Command

the Army Council of Review Boards (ACRB) and reviews cases of officers released for physical disability. Although a statutory board, the ADRB has been non-functioning since 1976 (COL R. Rowe, personal communication, April 20, 1990). The ABCMR provides the SA with the means for correcting an error or removing an injustice.

In addition to the above mentioned review boards, the Army Disability Rating Review Board (ADRRB) and the Army Physical Disability Appeal Board (APDAB) are two other regulatory boards within the ACRB that are closely related to the PDES (AR 635-40). The ADRRB reviews disability percentage ratings on request of a member who was retired because of physical disability. The APDAB reviews all disability evaluation cases forwarded to them by the USAPDA (see Figure 2).

Medical Evaluation Boards. Under the control of the AMEDD are the MEBDs located at the medical treatment facilities (AR 40-3, Chapter 7). A MEBD consists of two or more medical officers convened to document a member's medical status and duty limitations. One of the physician members must be a senior medical officer with detailed knowledge of directives pertaining to standards of medical fitness and disposition of patients, disability separation processing and the Veterans Administration Schedule for Rating Disabilities (VASRD).

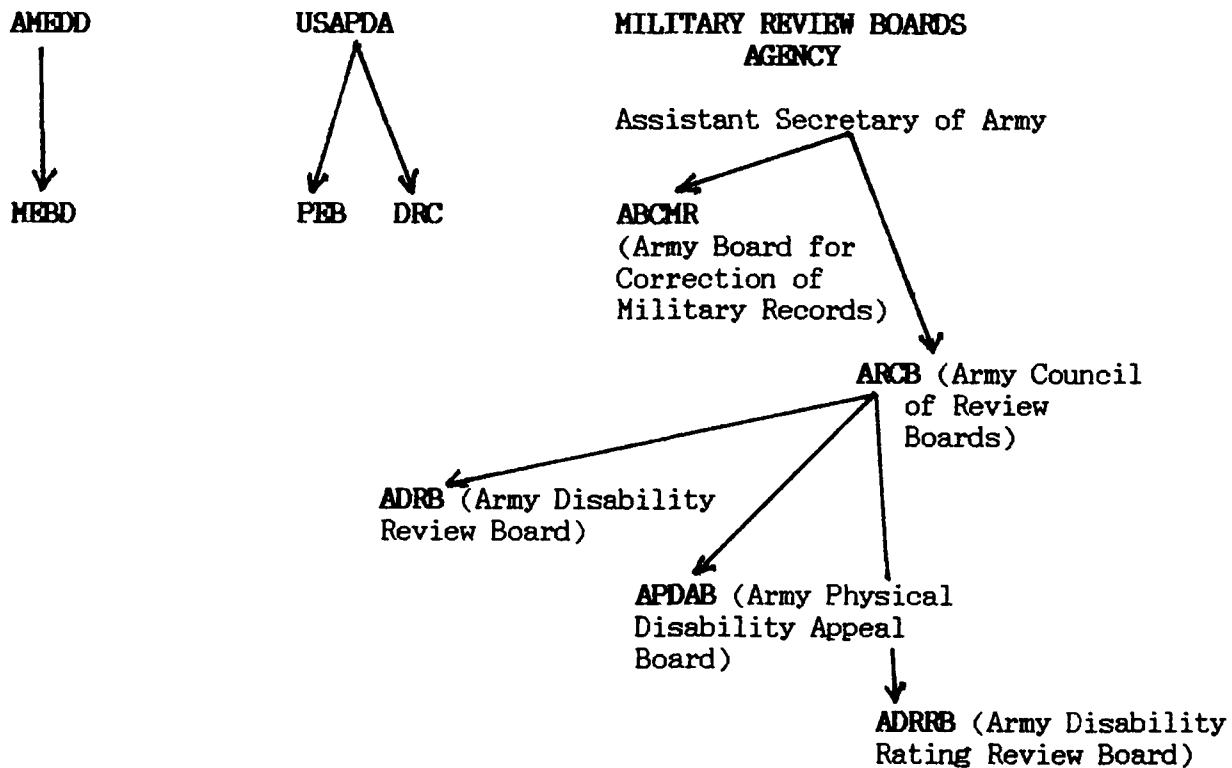


Figure 2: Physical Disability Evaluation System and related review boards.

AMEDD	=	Army Medical Department
DRC	=	Army Disability Review Council
MEBD	=	Medical Evaluation Board
PEB	=	Physical Evaluation Board
USAPDA	=	U.S. Army Physical Disability Agency

A MEBD usually operates informally. Members of the MEBD may all assemble to discuss and evaluate the patient's case. For the most part, the "medical board" generally consists of one physician reviewing the medical records and support documents and passing these on to the next physician. After the records and documents are reviewed, each physician either approves or disapproves with the primary or attending physician. When appropriate, a patient is given the opportunity to present his views relative to the proposed disposition.

Physical Evaluation Board Liaison Officer. An integral part of the physical disability process is the PEBLO (AR 635-40, Appendix C). Working at the medical treatment facility (MTF), the PEBLO is the member's advocate, counseling him on his rights and benefits within the PDES. The PEBLO acts as the pivotal coordinator at every step of the disability process. All documents to and from the member flow through the PEBLO.

As the title implies, the PEBLO is the liaison between the MTF and the PEB. Each PEBLO is responsible for ensuring that the records and the necessary documents are complete prior to forwarding the documents to the PEB.

U.S. Army Physical Disability Agency. The USAPDA, consisting primarily of the PEBs and the DRC is responsible for operating the

Army PDES (see Figure 2). All physical disability cases are evaluated by any of the four PEBs located at Fort Gordon, Georgia, Fort Sam Houston, Texas, Presidio of San Francisco and Walter Reed Army Medical Center (see Figure 3). Physical Evaluation Boards are fact-finding boards established to evaluate the physical condition of the member against the physical requirements of his particular office, grade, rank or rating. Members of PEBs are appointed by the Commanding General, USAPDA, for full-time duty. Each PEB panel consists of at least two field grade officers and a medical member, either a field grade officer of the Army Medical Corps or a Department of the Army civilian physician on duty with USAPDA. The president of the PEB is a senior, non-medical officer. At formal PEB hearings, a non-voting member of the Judge Advocate General's Corps is appointed to represent the service member. A recorder and reporter are also essential members who are permanently assigned to the PEB.

#### Physical Disability Evaluation Process

Objectives of PDES. The PDES is a program with a two-pronged objective designed to protect both the government and the individual service member. First, the PDES protects the government by ensuring an effective and fit military, maximally using all



1. Fort Gordon, GA 30905  
Surrounding CONUS hospitals  
Cases from South America & Caribbean
2. Fort Sam Houston, TX 78234  
Surrounding CONUS hospitals
3. Presidio of San Francisco, CA 94129  
Surrounding CONUS hospitals  
Cases from Alaska, Far East & Pacific
4. Walter Reed Army Medical Center, WASH, DC 20307-5001  
Surrounding CONUS hospitals  
Cases from Europe, Africa & Middle East

Figure 3. Location of Physical Evaluation Boards (PEBs) and areas serviced.

available manpower. Secondly, PDES protects the service member by retiring or separating a service member determined to be unfit to perform the duties of his office, grade, rank or rating because of physical disability. Additionally, the PDES provides benefits to an eligible service member whose military service is terminated by a service-connected disability (DoD Directive 1332.18, p.3-1; AR 635-40, p.3 ).

Physical Disability Process. As shown in Figure 4, the physical disability evaluation process is complex and, oftentimes, can be a lengthy process. The disability process begins when the attending physician believes that the member's condition does not meet retention requirements in accordance to AR 40-501. The process ends with the effective date issued by PERSCOM for separation or retirement. Because every effort is made to ensure the member is informed of his rights and is properly counseled at each step of the process, the disability process can be a lengthy process. The member can request an addendum or refute findings by the MEBD, PEB or any of the review boards. As mentioned earlier, the three major phases of the disability process include: (a) the medical evaluation board phase; (b) the physical evaluation board phase; and (c) the personnel phase.

Figure 4. Physical Disability Evaluation Process

Pre-medical Evaluation Board Phase. Not included in the physical disability processing time is the pre-medical evaluation board phase. This phase theoretically starts at the onset of signs and symptoms of an illness or date of an injury. It includes all the diagnostic radiologic and/or laboratory work up of a member's medical illness or injury, surgical procedure(s) performed to correct the medical condition or injury, consultations to specialists, hospitalizations, and/or treatment regimen(s). Everything that can possibly and reasonably be done, either diagnostically or therapeutically, will be done for the member. In essence, this phase represents the medical officers' attempt to restore an ill or injured soldier back to health.

As one would expect, the time period involving the pre-medical board phase is highly variable. This phase is dependent on the nature of the illness or injury, the extent the illness or injury affects the performance of the member and the patient's response to treatment. Additionally, this phase is extremely difficult to measure especially on a non-injury illness, because the onset of the illness may not be apparent to the member and/or may not be annotated in the records.

An example of a back injury is presented to illustrate the pre-medical evaluation board phase. During a training exercise, a

member injures his back during a routine parachute jump. He is hospitalized and treated for the injury. After hospitalization and physical therapy treatment, he is sent home to recuperate. The member does well and is then returned to duty. Despite some back pain, the member can perform his usual duties and responsibilities. However, eight years later, his pain becomes increasingly worse and hinders the member from adequately performing the duties of his rank, office or grade. In the meantime, he has been seen periodically by several medical officers for eight years to provide relief of his back pain during acute episodes. Surgical correction is recommended to the member for relief of his back pain. The member consents to the procedure and is scheduled for surgery. After surgery, the member is placed on convalescent leave to recuperate. After the recuperative period, the member still complains of back pain which prohibits him from satisfactorily performing his duties. At this time, the physician feels that everything reasonable has been done for this member. Further surgery will not benefit the member. The primary physician then decides, because the member does not meet retention requirements, to initiate the disability process by initiating a medical evaluation board. From the time of initial injury to the time the

decision is made to initiate a medical evaluation board is the pre-medical evaluation board phase. This phase is not included in the total processing time of physical disability cases.

Initiation of a Medical Evaluation Board. Medical evaluation boards are generally initiated by the attending or primary physician who is evaluating or treating a service member for an illness or injury. Routine checkups, such as periodic or retirement physical examinations, may identify a medical condition that may warrant a referral to a MEBD. Additionally, a request for medical evaluation for a disability may be initiated by a referral from Headquarters, Department of the Army (HQDA), the unit or MTF commander, or the Military Occupational Specialty Medical Retention Board (AR 635-40, 1985, Chap. 2; AR 600-50). The request may be completed on Department of Defense (DD) Form 689, Individual Sick Slip (see Figure 5).

Prerequisites Prior to Disability Processing. Certain prerequisites are required prior to processing service members for disability. Prerequisites for disability processing include the following: (a) service member is entitled to receive basic pay (reservists must be on active duty); (b) the illness or injury was not due to the member's intentional misconduct or wilful neglect; and (c) the illness or injury was incurred in the line of duty (AR 635-40). Further, service members who are charged with an offense

or under investigation of an offense which could result in dismissal may not be referred for disability processing. Service members who may be separated under other than honorable conditions may not be referred for disability processing.

Medical Evaluation Board Phase. The primary physician discusses with the member his intent to initiate a medical evaluation board. Through a memorandum, the physician then notifies the PEBLO that he intends to process the member for a MEBD. The PEBLO in turn requests the member's Personnel Qualification Records (Department of the Army [DA] Forms 2 and 2-1 and/or a line of duty investigation if the disability was due to an injury (see Figures 6 and 7). The attending physician completes DA 3349 (Physical Profile) specifying the member's physical limitations, Standard Form [SF] 93 (Report of Medical History), SF 88 (Report of Medical Examination and SF 502 (Clinical Record-Narrative Summary) (see Figures 8-11).

Generally, the Report of Medical history (SF 93) and Report of Physical Examination (SF 88) are completed at the same time. There are instances where these two segments are separately completed, such as a repeat physical examination after the member has been hospitalized or a surgical procedure has been performed. The

Figure 5. DD Form 689 (Individual Sick Slip)

<b>INDIVIDUAL SICK SLIP</b> <input type="checkbox"/> ILLNESS <input type="checkbox"/> INJURY		DATE
LAST NAME - FIRST NAME - MIDDLE INITIAL OF PATIENT		ORGANIZATION AND STATION
SERVICE NUMBER/SSN	GRADE/RATE	
UNIT COMMANDER'S SECTION		MEDICAL OFFICER'S SECTION
IN LINE OF DUTY		IN LINE OF DUTY
REMARKS		DISPOSITION OF PATIENT <input type="checkbox"/> SICK BAY <input type="checkbox"/> DUTY <input type="checkbox"/> QUARTERS <input type="checkbox"/> NOT EXAMINED <input type="checkbox"/> HOSPITAL <input type="checkbox"/> OTHER (Specify):
		REMARKS
SIGNATURE OF UNIT COMMANDER		SIGNATURE OF MEDICAL OFFICER

**DD FORM 689**  
1 MAR 63

PREVIOUS EDITIONS ARE OBSOLETE.



Figure 6. DA Forms 2 and 2-1 (Personnel Qualification Record)

Figure 7. DD Form 261 (Report of Investigation-Line  
of Duty and Misconduct Status)

REPORT OF INVESTIGATION LINE OF DUTY AND MISCONDUCT STATUS							DATE		
1 INVESTIGATION OF <input type="checkbox"/> INJURY <input type="checkbox"/> DISEASE <input type="checkbox"/> DEATH						3 STATUS			
2 TO: (Major Army or Air Force Commander)						a. <input type="checkbox"/> REGULAR OR EAD			
						b. CALLED OR ORDERED TO AD FOR (1) <input type="checkbox"/> MORE THAN 30 DAYS (2) <input type="checkbox"/> 30 DAYS OR LESS			
4 LAST NAME - FIRST NAME - MIDDLE INITIAL						5 SERVICE NO./SSAN		6 GRADE	
7 ORGANIZATION AND STATION OF INDIVIDUAL						c. <input type="checkbox"/> INACTIVE DUTY TRAINING (Type)			
8 OTHER MILITARY PERSONNEL INVOLVED IN THE SAME INCIDENT (Last Name - First Name - Middle Initial)						SERVICE NUMBER OR SSAN		GRADE	
								LOD INVESTIGATION MADE YES NO	
								START	
								FINISH	
								DATE	
								HOUR	
9 BASIS FOR FINDINGS (As determined by investigation)									
a. CIRCUMSTANCES		(1) HOUR		(2) DATE		(3) PLACE			
(4) HOW SUSTAINED				b. MEDICAL DIAGNOSIS					
c. <input type="checkbox"/> WAS <input type="checkbox"/> WAS NOT				PRESENT FOR DUTY					
d. ABSENT <input type="checkbox"/> WITH <input type="checkbox"/> WITHOUT				AUTHORITY					
g. REMARKS				(Do not complete e and f in death cases) e. INTENTIONAL MISCONDUCT OR NEGLIGENCE <input type="checkbox"/> WAS <input type="checkbox"/> WAS NOT      THE PROXIMATE CAUSE <input type="checkbox"/> WAS <input type="checkbox"/> WAS NOT      MENTALLY SOUND					
10 FINDINGS (Do not complete in death cases) <input type="checkbox"/> IN LINE OF DUTY <input type="checkbox"/> NOT IN LINE OF DUTY - NOT DUE TO OWN MISCONDUCT <input type="checkbox"/> NOT IN LINE OF DUTY - DUE TO OWN MISCONDUCT						ORGANIZATION AND STATION OF INVESTIGATING OFFICER			
						SIGNATURE AND TYPED NAME OF INVESTIGATING OFFICER			
HEADQUARTERS			DATE		GRADE		BRANCH		SERVICE NO./SSAN
ACTION BY APPOINTING AUTHORITY						ACTION BY REVIEWING AUTHORITY			
HEADQUARTERS			DATE		HEADQUARTERS			DATE	
<input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED (Reasons and substituted findings are on reverse)						<input type="checkbox"/> APPROVED <input type="checkbox"/> DISAPPROVED (Reasons and substituted findings are on reverse)			
SIGNATURE AND TYPED NAME						SIGNATURE AND TYPED NAME			
GRADE		BRANCH		SERVICE NO./SSAN		GRADE		BRANCH	
FOR ACTION OF OFFICE INDICATED IN ITEM 2									

"REPRODUCED AT GOVERNMENT EXPENSE."

Figure 8. DA Form 3349 (Physical Profile)

# PHYSICAL PROFILE

For use of this form, see AR 40-501; the proponent agency is the Office of The Surgeon General

## 1. MEDICAL CONDITION

2.

P	U	L	H	E	S

## 3. ASSIGNMENT LIMITATIONS ARE AS FOLLOWS

CODES

## 4. THIS PROFILE IS ☐ PERMANENT ☐ TEMPORARY EXPIRATION DATE:

## 5. THE ABOVE STATED MEDICAL CONDITION SHOULD NOT PREVENT THE INDIVIDUAL FROM DOING THE FOLLOWING ACTIVITIES

- |  |   |   |  |  |
|--|---|---|--|--|
| <input type="checkbox"/> Groin Stretch     | <input type="checkbox"/> Thigh Stretch        | <input type="checkbox"/> Lower Back Stretch   | <input type="checkbox"/> Neck & Shoulder Stretch | <input type="checkbox"/> Neck Stretch      |
| <input type="checkbox"/> Hip Raise         | <input type="checkbox"/> Quads Stretch & Bal. | <input type="checkbox"/> Single Knee to Chest | <input type="checkbox"/> Upper Back Stretch      | <input type="checkbox"/> Ankle Stretch     |
| <input type="checkbox"/> Knee Bender       | <input type="checkbox"/> Calf Stretch         | <input type="checkbox"/> Straight Leg Raise   | <input type="checkbox"/> Chest Stretch           | <input type="checkbox"/> Hip Stretch       |
| <input type="checkbox"/> Side-Straddle Hop | <input type="checkbox"/> Long Sit             | <input type="checkbox"/> Elongation Stretch   | <input type="checkbox"/> One-Arm Side Stretch    | <input type="checkbox"/> Upper Body Wt Tng |
| <input type="checkbox"/> High Jumper       | <input type="checkbox"/> Hamstring Stretch    | <input type="checkbox"/> Turn and Bounce      | <input type="checkbox"/> Two-Arm Side Stretch    | <input type="checkbox"/> Lower Body Wt Tng |
| <input type="checkbox"/> Jogging in Place  | <input type="checkbox"/> Hams. & Calf Stretch | <input type="checkbox"/> Turn and Bend        | <input type="checkbox"/> Side Bender             | <input type="checkbox"/> All               |

## 6. AEROBIC CONDITIONING EXERCISES

- ☐ Walk at Own Pace and Distance  
☐ Run at Own Pace and Distance  
☐ Bicycle at Own Pace and Distance  
☐ Swim at Own Pace and Distance  
☐ Walk or Run in Pool at Own Pace

- ☐ Unlimited Walking  
☐ Unlimited Running  
☐ Unlimited Bicycling  
☐ Unlimited Swimming

- ☐ Run at Training Heart Rate for \_\_\_\_ Min.  
☐ Bicycle at Training Heart Rate for \_\_\_\_ Min.  
☐ Swim at Training Heart Rate for \_\_\_\_ Min.

## 7. FUNCTIONAL ACTIVITIES

- ☐ Wear Backpack (40 Lbs.)  
☐ Wear Helmet  
☐ Carry Rifle  
☐ Fire Rifle

With Hearing Protection

- ☐ KP/Mopping/Mowing Grass  
☐ Marching Up to \_\_\_\_ Miles  
☐ Lift Up to \_\_\_\_ Pounds  
☐ All

## PHYSICAL FITNESS TEST

- |                                       |                                  |
|---------------------------------------|----------------------------------|
| <input type="checkbox"/> Two Mile Run | <input type="checkbox"/> Walk    |
| <input type="checkbox"/> Push-Ups     | <input type="checkbox"/> Swim    |
| <input type="checkbox"/> Sit-Ups      | <input type="checkbox"/> Bicycle |

## 8. TRAINING HEART RATE FORMULA

MALES 220

FEMALES 225

MINUS (-) AGE

MINUS (-) RESTING HEART RATE

TIMES (x) % INTENSITY

PLUS (+) RESTING HEART RATE

50% EXTREMELY POOR CONDITION

60% HEALTHY, SEDENTARY INDIVIDUAL

70% MODERATELY ACTIVE, MAINTENANCE

80% WELL TRAINED INDIVIDUAL

## 9. OTHER

TYPED NAME AND GRADE OF PROFILING OFFICER

SIGNATURE

DATE

TYPED NAME AND GRADE OF PROFILING OFFICER

SIGNATURE

DATE

## ACTION BY APPROVING AUTHORITY

PERMANENT CHANGE OF PROFILE

☐ APPROVED

☐ NOT APPROVED

TYPED NAME, GRADE & TITLE OF APPROVING AUTHORITY

SIGNATURE

DATE

## ACTION BY UNIT COMMANDER

THIS PERMANENT CHANGE IN PROFILE SERIAL

☐ DOES

☐ DOES NOT REQUIRE A CHANGE IN MEMBER'S

☐ MILITARY OCCUPATIONAL SPECIALTY

☐ DUTY ASSIGNMENT

BECAUSE:

TYPED NAME AND GRADE OF UNIT COMMANDER

SIGNATURE

DATE

PATIENT'S IDENTIFICATION (For typed or written entries give: Name (last, first, middle); grade; SSN; hospital or medical facility)

UNIT

ISSUING CLINIC AND PHONE NUMBER

## DISTRIBUTION

UNIT COMMANDER - ORIGINAL & 1 COPY  
 HEALTH RECORD JACKET - 1 COPY  
 CLINIC FILE - 1 COPY  
 MILPO - 1 COPY

Figure 9. SF 93 (Report of Medical History)

## REPORT OF MEDICAL HISTORY

(THIS INFORMATION IS FOR OFFICIAL AND MEDICALLY-CONFIDENTIAL USE ONLY AND WILL NOT BE RELEASED TO UNAUTHORIZED PERSONS)

1. LAST NAME—FIRST NAME—MIDDLE NAME				2. SOCIAL SECURITY OR IDENTIFICATION NO.					
3. HOME ADDRESS (No. street or RFD, city or town, State, and ZIP CODE)				4. POSITION (title, grade, component)					
5. PURPOSE OF EXAMINATION			6. DATE OF EXAMINATION		7. EXAMINING FACILITY OR EXAMINER, AND ADDRESS (Include ZIP Code)				
8. STATEMENT OF EXAMINEE'S PRESENT HEALTH AND MEDICATIONS CURRENTLY USED (Follow by description of past history, if complaint exists)									
9. HAVE YOU EVER (Please check each item)						10. DO YOU (Please check each item)			
YES	NO	(Check each item)				YES	NO	(Check each item)	
		Lived with anyone who had tuberculosis						Wear glasses or contact lenses	
		Coughed up blood						Have vision in both eyes	
		Bled excessively after injury or tooth extraction						Wear a hearing aid	
		Attempted suicide						Stutter or stammer habitually	
		Been a sleepwalker						Wear a brace or back support	
11. HAVE YOU EVER HAD OR HAVE YOU NOW (Please check at left of each item)									
YES	NO	DON'T KNOW	(Check each item)		YES	NO	DON'T KNOW	(Check each item)	
			Scarlet fever, erysipelas					"Trick" or locked knee	
			Rheumatic fever					Foot trouble	
			Swollen or painful joints					Neuritis	
			Frequent or severe headache					Paralysis (include infantile)	
			Dizziness or fainting spells					Epilepsy or fits	
			Eye trouble					Car, train, sea or air sickness	
			Ear, nose, or throat trouble					Frequent trouble sleeping	
			Hearing loss					Depression or excessive worry	
			Chronic or frequent colds					Loss of memory or amnesia	
			Severe tooth or gum trouble					Nervous trouble of any sort	
			Sinusitis					Periods of unconsciousness	
			Hay Fever						
			Head injury						
			Skin diseases						
			Thyroid trouble						
			Tuberculosis						
			Asthma						
			Shortness of breath						
			Pain or pressure in chest						
			Chronic cough						
			Palpitation or pounding heart						
			Heart trouble						
			High or low blood pressure						
13. WHAT IS YOUR USUAL OCCUPATION?					14. ARE YOU (Check one)				
					<input type="checkbox"/> Right handed <input type="checkbox"/> Left handed				

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Figure 10. SF 88 (Report of Medical Examination)



## REPORT OF MEDICAL EXAMINATION

Exception to SF 88  
Approved by OIRM 12-83

REPRODUCED AT GOVERNMENT EXPENSE

1. LAST NAME—FIRST NAME—MIDDLE NAME			2. GRADE AND COMPONENT OR POSITION		3. IDENTIFICATION NO.
4. HOME ADDRESS (Number, street or RFD, city or town, State and ZIP Code)			5. PURPOSE OF EXAMINATION		6. DATE OF EXAMINATION
7. SEX	8. RACE	9. TOTAL YEARS GOVERNMENT SERVICE MILITARY      CIVILIAN		10. AGENCY	11. ORGANIZATION UNIT
12. DATE OF BIRTH		13. PLACE OF BIRTH		14. NAME, RELATIONSHIP, AND ADDRESS OF NEXT OF KIN	
15. EXAMINING FACILITY OR EXAMINER, AND ADDRESS				16. OTHER INFORMATION	
17. RATING OR SPECIALTY				TIME IN THIS CAPACITY (Total)	LAST SIX MONTHS

CLINICAL EVALUATION			NOTES (Describe every abnormality in detail. Enter pertinent item number before each comment. Continue in item 73 and use additional sheets if necessary.)
NOR- MAL	(Check each item in appropriate column, enter "NE" if not evaluated)	ABNOR- MAL	
	18. HEAD, FACE, NECK, AND SCALP		
	19. NOSE		
	20. SINUSES		
	21. MOUTH AND THROAT		
	22. EARS—GENERAL (Int. & ext. canals) (Auditory acuity under items 70 and 71)		
	23. DRUMS (Perforation)		
	24. EYES—GENERAL (Visual acuity and refraction under items 19, 60 and 67)		
	25. OPHTHALMOSCOPIC		
	26. PUPILS (Equality and reaction)		
	27. OCULAR MOTILITY (Associated parallel movements, nystagmus)		
	28. LUNGS AND CHEST (Include breasts)		
	29. HEART (Thrust, size, rhythm, sounds)		
	30. VASCULAR SYSTEM (Arteriosclerosis, etc.)		
	31. ABDOMEN AND VISCERA (Include hernia)		
	32. ANUS AND RECTUM (Hemorrhoids, fistulae, fissures, if indicated)		
	33. ENDOCRINE SYSTEM		
	34. G-U SYSTEM		
	35. UPPER EXTREMITIES (Strength, range of motion)		
	36. FEET		
	37. LOWER EXTREMITIES (Except feet) (Strength, range of motion)		
	38. SPINE, OTHER MUSCULOSKELETAL		
	39. IDENTIFYING BODY MARKS, SCARS, TATTOOS		
	40. SKIN, LYMPHATICS		
	41. NEUROLOGIC (Equilibrium tests under item 72)		
	42. PSYCHIATRIC (Specify any personality deviation)		
	43. PELVIC (Females only) (Check how done) <input type="checkbox"/> VAGINAL <input type="checkbox"/> RECTAL		

(Continue in item 73)

44. DENTAL (Place appropriate symbols, shown in examples, above or below number of upper and lower teeth)																		REMARKS AND ADDITIONAL DENTAL DEFECTS AND DISEASES																																																																																																													
<table border="0"><tr><td colspan="4">0 17 16 15 14</td><td colspan="4">Non restorable teeth 17 16 15 14</td><td colspan="4">Missing teeth 17 16 15 14</td><td colspan="4">Replaced by dentures 17 16 15 14</td><td colspan="4">Fixed Partial dentures 17 16 15 14</td></tr><tr><td>R</td><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td><td>11</td><td>12</td><td>13</td><td>14</td><td>15</td><td>16</td><td>L</td></tr><tr><td>I</td><td>32</td><td>31</td><td>30</td><td>29</td><td>28</td><td>27</td><td>26</td><td>25</td><td>24</td><td>23</td><td>22</td><td>21</td><td>20</td><td>19</td><td>18</td><td>17</td><td>E</td></tr><tr><td>G</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>F</td></tr><tr><td>H</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>T</td></tr><tr><td>T</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>																				0 17 16 15 14				Non restorable teeth 17 16 15 14				Missing teeth 17 16 15 14				Replaced by dentures 17 16 15 14				Fixed Partial dentures 17 16 15 14				R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	L	I	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	E	G																	F	H																	T	T															
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### LABORATORY FINDINGS

45. URINALYSIS A. SPECIFIC GRAVITY		46. CHEST X RAY (Place, date, film number and result)	
B. ALBUMIN	D. MICROSCOPIC		
C. SUGAR			
47. SEROLOGY (Specify test used and result)	48. EKG	49. BLOOD TYPE AND RH FACTOR	50. OTHER TESTS

Figure 11. SF 502 (Clinical Record-Narrative Summary)

<b>MEDICAL RECORD</b>		<b>NARRATIVE SUMMARY (CLINICAL RESUME)</b>	
DATE OF ADMISSION	DATE OF DISCHARGE		NUMBER OF DAYS HOSPITALIZED

(Sign and date at end of narrative)

"REPRODUCED AT GOVERNMENT EXPENSE"

(Use additional sheets of this form (Standard Form 502) if more space is required)

SIGNATURE OF PHYSICIAN	DATE	IDENTIFICATION NO	ORGANIZATION
PATIENT'S IDENTIFICATION For typed or written entries give Name last first middle rank grade hospital or medical facility		REGISTER NO	WARD NO

**NARRATIVE SUMMARY (CLINICAL RESUME)**

Standard Form 502

General Services Administration and  
 Interagency Committee on Medical Records  
 FIRM (41 CFR) 201-45 505  
 MARCH 1979 502-115-02

Clinical Record-Narrative Summary or NARSUM (SF 502) is completed after all diagnostic laboratory and radiologic results, consultations, etc. have been received by the physician, or after hospitalization or treatment regimens have been tried.

In the past, entire medical treatment records were required for submission to the PEBs. To facilitate the processing of physical disability cases, this requirement has been eliminated by USAPDA. Physical evaluation boards rely solely on evidence presented in the NARSUM (SF 502). It is critical, therefore, for the NARSUM to be accurate and complete. The NARSUM must reflect the member's medical status and how his status affects the duties and functions of his PMOS. If pertinent medical information has been inadvertently excluded from the narrative summary or new medical evidence is uncovered, an addendum must be attached to the NARSUM.

Once the DA 3349, SF 88, SF 502 are completed, a MEBD is convened to document the member's medical status and duty limitations insofar as duty is affected by the member's medical status. Two or more physician members constitute a MEBD (AR 40-3, Chapter 7). One of the physician members must be a senior medical officer who has detailed knowledge of the directives pertaining to standards of medical fitness and disposition of patients, disability separation processing and the Veterans Administration

Schedule for Rating Disabilities (VASRD). When a board is considering conditions which normally fall within the professional accreditation of the Dental Corps, membership of the board will include a dentist. Likewise, a board considering a psychiatric problem will include a psychiatrist.

Medical boards assemble together and agree or disagree with the attending physician that the member does not meet retention criteria. For the most part, however, medical boards are convened informally by having one physician review the documents and then passing the documents to the next physician for his review. Medical evaluation board proceedings are recorded on DA Form 3947 (Medical Evaluation Proceedings)(see Figure 12). The MEBD proceedings report all abnormalities and their impact on the individual's functional ability. Correlation must be established between the abnormalities and the inability to perform duties. The MEBD will then recommend referral of members who do not meet medical retention standards to the geographically responsible PEB. The four Army PEBs are located at Walter Reed Army Medical Center in Washington D.C., Eisenhower Army Medical Center in Fort Gordon, Georgia, Fort Sam Houston, Texas and at the Presidio of San Francisco, California (see Figure 3).

Figure 12. DA Form 3947 (Medical Evaluation Proceedings)

MEDICAL EVALUATION BOARD PROCEEDINGS				MEDICAL TREATMENT FACILITY		DATE			
For use of this form, see AR 40-3; the proponent agency is the Office of The Surgeon General.									
1. NAME (Last, First, MI)			2. GRADE		3. SSN		4. COMPONENT		
5. DEPARTMENT			6. SEX	7. DATE OF BIRTH		8. ORGANIZATION			
9. TOTAL YEARS OF MILITARY SERVICE			10. DATE ENTERED CURRENT TOUR OF ACTIVE DUTY			11. MILITARY OCCUPATIONAL SPECIALITY (include code)			
a. ACTIVE			b. INACTIVE						
<b>ACTION BY THE BOARD</b> BY DIRECTION OF THE APPOINTING AUTHORITY, THE BOARD CONVENED TO EVALUATE THE PATIENT IDENTIFIED ABOVE									
12. The patient <input type="checkbox"/> did <input type="checkbox"/> did not present views in own behalf. (When presented, attach a summary of the patient's comments to the report)									
13. DIAGNOSIS									
AFTER CONSIDERATION OF CLINICAL RECORDS, LABORATORY FINDINGS, AND PHYSICAL EXAMINATION, THE BOARD FINDS THAT THE PATIENT HAS THE FOLLOWING MEDICAL CONDITIONS/DEFECTS. LIST ALL DIAGNOSIS. USE JOINT ARMED FORCES TERMINOLOGY AND DIAGNOSTIC CODE(S). a			APPROXIMATE DATE OF ORIGIN b	INCURRED WHILE ENTITLED TO BASE PAY c		EXISTED PRIOR TO SERVICE d		PERMANENTLY AGGRAVATED BY SERVICE e	
				YES      NO		YES      NO		YES      NO	
14. The board recommends that the patient be:									
<input type="checkbox"/> Returned to duty <input type="checkbox"/> Returned to duty with the following limitations:				<input type="checkbox"/> Referred to a Physical Evaluation Board (PEB) <input type="checkbox"/> Other (specify)					

"REPRODUCED AT GOVERNMENT EXPENSE"

Physical Evaluation Board Liaison Officer. Upon completion of the MEBD, the documents are then sent to the PEBLO at each MTF. The PEBLO first sends the documents to the Commander or Deputy Commander for Clinical Services (DCCS) for approval. Then, the PEBLO presents the MEBD findings and other documents to the member for his concurrence or non-concurrence. The PEBLO has the responsibility of counseling the service member of his statutory rights and obligations in the process. The PEBLO also assists the service member in ensuring that all the necessary documents are complete and accurate prior to forwarding these documents to the PEB.

The member is given three days to either concur or non concur with the MEBD findings. He can request an addendum if there are significant findings omitted in the physical examination report or narrative summary or additional medical evidence has been uncovered. The request for an addendum is again routed through the DCCS (see Figure 4). If the DCCS does not agree with the member's request for an addendum, the case will be sent back to the PEBLO and then forwarded to the PEB. If the DCCS agrees to the member's request, he forwards the request to the attending physician. The attending physician either rebuts the request or completes the addendum and returns it to the PEBLO. The addendum is shown to the member for his concurrence. Once the member concurs with the



addendum, the MEBD findings and appropriate records are assembled by the PEBLO which is then forwarded to the PEB.

Physical Evaluation Board Phase. Upon receipt of all the necessary documents, the PEB initially reviews the case at an informal board. This informal PEB makes a determination whether a service member is fit or unfit to physically perform his duties. If the informal board finds the member unfit, the board utilizes the VASRD to describe the disability and the percentage rating (AR 635-40, Appendix B). The decision to separate with or without severance pay or to temporarily or permanently retire the member depends on a number of factors. Members whose physical disabilities are rated at 30% or more and whose condition is not expected to change within the next five years, are permanently retired. If the disability could improve or worsen within five years, the member is placed on temporary disability retirement. Members whose physical disabilities are rated less than 30%, but with 20 years or more of active duty service may also be retired permanently. Members rated at less than 30%, with less than 20 years of active duty service are separated and receive a lump-sum based on their grade level and years of service.

The informal PEB findings are recorded on a DA Form 198 (Physical Evaluation Board Proceedings)(see Figure 13), and sent

back to the PEBLO. The PEBLO contacts the member to notify him of the informal PEB results. When the informal board findings are presented by PEBLO to the member, he may elect the following choices (LTC L. C. Hoots, personal communication, July 14, 1988):

a. The member can agree and waive a formal board evaluation; the case is then processed according to the informal board recommendation. The informal PEB findings and documents are sent back to PEB, which is forwarded to PERSCOM for final administrative processing.

b. The member can disagree and waive a formal board evaluation, however a written appeal stating the reason for his disagreement must be submitted to the informal board to reconsider its original findings. If the member does not present a written appeal or new medical evidence, the case will then be forwarded to the DRC of USAPDA for review. If DRC agrees with the informal PEB findings, the documents are sent to PERSCOM for final processing.

c. The member can disagree and demand a formal board evaluation. The member may choose to be represented by legal counsel, either by a regularly appointed military counsel at no expense to the member or by a civilian counsel at his own expense. The formal board is then scheduled 14-21 days from the election date.

Figure 13. DA Form 199 (Physical Evaluation Board Proceedings)

For use of this form, see AR 635-40; the proponent agency is USAPDA.

For use of this form, see AR 635-40; the proponent agency is USAPDA.

19  
"REPRODUCED AT GOVERNMENT EXPENSE"

**13 ELECTION OF MEMBER**

TO: President, Physical Evaluation Board

I HAVE BEEN ADVISED OF THE FINDINGS AND RECOMMENDATIONS OF THE PHYSICAL EVALUATION BOARD, AND HAVE RECEIVED A FULL EXPLANATION OF THE RESULTS OF THE FINDINGS AND RECOMMENDATIONS AND LEGAL RIGHTS PERTAINING THERETO AND

- ☐ I CONCUR AND WAIVE A FORMAL HEARING OF MY CASE
- ☐ I DO NOT CONCUR BUT WAIVE A FORMAL HEARING. MY WRITTEN APPEAL ☐ IS ATTACHED ☐ IS NOT ATTACHED
- ☐ I DO NOT CONCUR AND DEMAND A FORMAL HEARING ☐ WITHOUT PERSONAL APPEARANCE ☐ WITH PERSONAL APPEARANCE.
- ☐ I REQUEST REGULARLY APPOINTED COUNSEL REPRESENT ME
- ☐ I WILL HAVE COUNSEL OF MY CHOICE AT NO EXPENSE TO THE GOVERNMENT. I UNDERSTAND THAT I MUST NOTIFY MY COUNSEL AT THIS TIME OF THE PENDING HEARING. I FURTHER UNDERSTAND THAT A DELAY WILL NOT BE GRANTED MERELY BECAUSE I DID NOT CONTACT MY COUNSEL IN SUFFICIENT TIME FOR HIM TO PROPERLY PREPARE. I WILL INFORM MY COUNSEL THAT HE SHOULD IMMEDIATELY CONTACT THE PEB TO COORDINATE FURTHER ACTIONS IN MY CASE

SIGNATURE OF MEMBER

DATE

**14. COUNSELOR'S STATEMENT**

I have informed the member of the findings and recommendations of the Physical Evaluation Board and explained to him the result of the finding and recommendations and his legal rights pertaining thereto. The member has made the election(s) shown above

TYPED NAME AND GRADE OF COUNSELOR

SIGNATURE

DATE

**15. FOR FORMAL HEARINGS:**

- a. THE INDIVIDUAL ELECTED ☐ TO APPEAR ☐ NOT TO APPEAR, AND ☐ DID ☐ DID NOT APPEAR.
- b. THE MEMBER WAS REPRESENTED BY THE REGULARLY APPOINTED COUNSEL, OR INDIVIDUAL COUNSEL SELECTED BY THE MEMBER AS INDICATED IN EXHIBIT ☐. THE COUNSEL'S NAME IS
- c. IF THE MEMBER'S CASE WAS REFERRED FROM ANOTHER STATION, THE PHYSICAL EVALUATION BOARD LIAISON OFFICER'S NAME IS
- d. IF THE MEMBER WAS NOT PRESENT BECAUSE HE IS A DELETERIOUS TYPE CASE, OR OTHERWISE UNABLE TO COOPERATE IN A REQUIRED FORMAL HEARING,  (Next-of-kin or guardian) ☐ WAS ☐ WAS NOT PRESENT TO REPRESENT HIS INTERESTS, NEXT-OF-KIN OR GUARDIAN'S ELECTION IS AT EXHIBIT
- e. TRANSCRIPT ☐ IS ☐ IS NOT REQUIRED.

REPORTER

REPORTER

INTERPRETER (if any)

The attached transcript of the formal hearing, if required, is a record of proceedings and is accurate and complete.

DATE BOARD ADJOURNED

TYPED NAME, GRADE, BRANCH OF COUNSEL

TYPED NAME, GRADE, BRANCH OF PRESIDENT

SIGNATURE

SIGNATURE

**16 REMARKS AND CONTINUATIONS**

Again, the member has three working days to make his election on the informal board findings. If the election statement is not returned to the PEB within the prescribed time, it is presumed that the member agrees with the PEB recommendations and the case is forwarded to PERSCOM for final processing.

If the member demands a formal PEB hearing, the results of the formal PEB are recorded on a second DA Form 199, sent back to the PEBLO and presented to the member. He is allowed three days to agree or disagree with the formal PEB recommendations. If the member agrees with the formal PEB findings, the case is then forwarded to DRC, USAPDA for review. If the member does not concur with the formal PEB findings, he must submit reasons in writing for his nonconcurrence. The case will be reviewed informally by the formal PEB and forwarded to the DRC, USAPDA (see Figure 4).

Disability Review Council and Appeals Process. In the past, all physical disability cases, formal and informal, contested or not, were reviewed by USAPDA. Currently, however, only physical disability cases that are contested are automatically reviewed by the DRC of USAPDA. Additionally, a certain percentage of the total number of cases are reviewed for quality control by USAPDA (MAJ F. Dennis, personal communication, March 28, 1990).

The DRC of USAPDA is charged with the responsibility for determining if the member received a full and fair hearing, that

the MEBD and PEB proceedings were conducted according to regulations, and that the findings were equitable. If DRC concurs with the PEB findings, the case is then forwarded to PERSCOM for final action. If DRC does not agree with the PEB findings, the Council can modify the findings. These modifications are then sent back to the service member through the PEBLO (see Figure 4). If the member concurs with DRC's modifications, the findings are sent to PERSCOM for final disposition. If the member does not concur with DRC's modifications, the case is sent back to DRC and forwarded to the Army Physical Disability Appeals Board (APDAB). The APDAB reviews the cases to see if the member received a fair hearing. The APDAB can either agree with the USAPDA, agree with the physical evaluation board, agree with the soldier's rebuttal, or specify its own decision and new findings (Morrisette, 1986). The APDAB makes the final decision.

#### Problems with the Physical Disability Evaluation System

The Physical Disability Evaluation System for all three military services has been under scrutiny since the day of its inception. The system has been criticized for its untimely processing of physical disability cases. In 1976, General Accounting Office (GAO) randomly examined 146 of the 734 Army retirement records of physical disability cases between April 1 and June 30, 1975 (GAO Letter Report, 1976). In its review, GAO found

the Army unnecessarily delayed issuance of retirement orders. Orders were being issued about 21 days after the retirements were approved and effective dates of retirement were established within 13 days after orders were issued. The overall average was about 34 days, which exceeded the 20-day standard. In comparison to other military services, the Air Force and Navy processed disability retirements within the 20-day standard, the Army and Marine Corps did not.

In 1986, BG R. L. Dilworth, The Adjutant General and Commanding General of the Army Physical Disability Agency at the time was instrumental in drawing attention to the processing time of physical disability cases (Morrissette, 1986). He determined that the term "average processing days" inaccurately described the time required to evaluate and render a disposition for a soldier who is medically unfit for the performance of his duty. To emphasize the importance of the disability processing, BG Dilworth changed average processing days to "readiness days lost". BG Dilworth was also instrumental in reducing the physical disability processing time by the USAPDA. Efforts to reduce processing time include: (a) eliminating review of physical disability cases if the members agreed with the decision of the PEB; (b) emphasizing to all activities involved in the disability process the need to reduce the processing time; and (c) improving their automation and



communication capabilities, such as installing facsimile machines in each of the medical treatment facilities.

Health Services Command established a 30-day standard for processing time of MEBDs at the MTF (AAA, 1989; T. E. Strevey, Jr., personal communication, March 19, 1987). It is unclear how HSC arrived at its 30-day standard. Further, there is some disagreement as to the start date of MEBDs. Theoretically, the MEBD processing time should start as soon as the physician recognizes that the service member with his injury or illness does not meet retention criteria. At one time the date of the physical examination was the start date. Recently, however, USAPDA and HSC agreed the start date of MEBDs should be the date the narrative summary was dictated. Still others believe that the start date should be the date of the MEBD (T. Recio, personal communication, March 20, 1990).

McFarling studied 100 consecutive medical board records referred to the Fort Sam Houston Physical Evaluation Board from regional MTFs from January through March of 1988 (McFarling, 1988). One of his study's objectives was to determine whether or not a recorded event (the date of the initial profile, the date of the physician's decision to initiate a MEBD, the date of the physical examination, the date of the narrative summary dictation, or the date the MEBD is signed by the hospital Deputy Commander for

Clinical Services) could be selected for use as a "start point" for the MEBD. Although McFarling felt that the obvious start point was the decision to initiate a MEBD, he concluded that none of these dates would be useful. He pointed out that the dates recorded in the records were either missing or inaccurate. Further, he questioned the probability of deliberate manipulation of the dates and inattentive record keeping. Finally, McFarling concluded that a specific start point for a MEBD process was inadvisable due to the uncertainty of the response to treatment and eventual prognosis.

The U.S. Army Audit Agency recently released its "Report of Audit on Disability Payments to Military Personnel" (U.S. AAA, 1989). A portion of its audit report evaluated the processing time of physical disability cases. The report determined that the total MEBD processing time, from the date a physician identified a member for disability processing until the effective date of the soldier's retirement or separation, was unnecessarily delayed. The total processing time averaged 150 days. Considerable delays were noted in at least two phases of the process, i.e. MEBD phase and PERSCOM phase. Both exceeded established standards by 25 and 18 days, respectively. In its review of MEBD processing time at four MTFs, the U.S. AAA concluded that MEBDs unnecessarily delayed preparing and processing disability cases. The average MEBD processing time

was 55 days, starting from the date of the physical examination (SF 88) to the date PEB received the case. In addition, PERSCOM did not process cases promptly and did not date orders implementing decisions of USAPDA correctly.

#### Purpose of the study

The objectives of this study are: (a) determine the average total processing time of MEBDs at the Joint Military Medical Command-Brooke Army Medical Center (JMMC-BAMC); (b) determine the specific segments of the MEBD process; (c) determine which of the segment(s), if any, significantly contribute to delays in the MEBD process; (d) recommend possible solutions to minimize delays in the MEBD process.

## II. Method And Procedures

#### Records reviewed

Forty-six physical disability case records for FY 89, filed at the PEBLO's office, JMMC-BAMC, were reviewed. Documents in each physical disability case record included the following: PEBLO control card (see Figure 14), SF 88 (Report of Medical Examination), SF 502 (Clinical Record-Narrative Summary), DA 3947 (Medical Board Proceedings), DA 199 (PEB Proceedings), DA Form 2--Part I and DA Form 2-1--Part II (Personnel Qualification Record, Enlisted Qualification Record, Officer Qualification Record), documents such as letters, efficiency reports or personal

Figure 14. PEBLO (BAMC) Control Card

NAME (Last, First, MI)	RANK	SSN	HOSP/WARD	PHONE NUMBER
DIAGNOSIS _____				
ATTEND MEBD ORIENTATION _____		MEBD INITIATED _____		REQ PERS DATA _____
REC PERS DATA _____	ASSIGN MED HOLD CO _____		DATE MEBD REC & TO DCCS _____	
NARRATIVE SUMMARY DATE _____		MEBD DATE _____	HEALTH RECORD REC'VD _____	
DATE DCCS ACTION _____		DATE FROM DCCS _____		
INITIAL PEBLO COUNSELLING _____		BY _____	FORWARDED TO PEB/UNIT _____	
PEB CONVENED _____		TYPE _____	RECOMMENDATION _____	
DATE CONCURRED _____		DATE REQ FORMAL _____	FORMAL DATE _____	
DATE PERM CH HOME _____		DATE DA FORM 199 w/RECORDS TO PEB _____		
FORMAL FINDINGS _____		ACTION _____	DATE VA HOSP REQ _____	
WHERE _____		DATE MOVED TO VA HOSP _____		
<b><u>MEBD/PEB DATA CONTROL</u></b>				

statements that provide evidence of physical ability or inability to perform military duties adequately, and Application for Continuance on Active Duty (COAD) if member applied.

Expedite cases are physical disability cases that are expeditiously processed due to the seriousness of the illness, i.e. imminent death. Although expedite cases follow the normal sequence in the physical disability process, processing time is considerably shortened for the protection of the service member and his family. These cases are excluded from the study. Physical disability cases of Army members initially evaluated from other military services, i.e. members with psychiatric illness are initially evaluated at Wilford Hall Medical Center, are included in the study. Service members from other military services who are initially evaluated at JMMC-BAMC are also included in the study.

#### Ethical Considerations

Since this research study involved reviewing the records of physical disability cases, including medical records of service members, it followed the required standards for research involving medical records at BAMC. All materials and documents containing identifiable patient information were stored in secure locations. No disclosure or use of identifiable patient information was used without prior review and approval by the Clinical Investigation Committee and the Institutional Review Board. Publication of the

results based on this research will disallow identification of any individual patient.

#### Procedure

A total of 46 physical disability case records filed at the PEBLO's office of JMMC-BAMC were reviewed. The following demographic data were obtained from each record: name, social security number, age, sex, race, military service, years of active duty, primary military occupational specialty, primary and secondary diagnoses. Each record was then evaluated for the total processing time of the MEBD. The following dates were obtained from each case record and recorded on a MEBD study worksheet for (see Figure 15):

- (a) Onset of illness or injury

Eg: date of motor vehicle accident

- (b) Date indicating the initiation of a MEBD
- (c) Date of the Physical Examination (SF 88))
- (d) Date of dictation of Narrative Summary (SF 502)
- (e) Date of MEBD Proceedings (DA Form 3947)
- (f) Date of receipt of DA Form 3947 and supporting documents  
by PEBLO
- (g) Date documents were sent to the DOCS
- (h) Date documents were received by PEBLO from the DOCS
- (i) Date documents were sent to PEB

- (j) Date documents were received by PEBLO from PEB
- (k) Date of request for addenda to medical records
- (l) Date of receipt of addenda by PEBLO
- (m) Date of request for personnel data of service member
- (n) Date of receipt of personnel data
- (o) Date of concurrence or nonconcurrence of MEBD by member

After obtaining the above dates from the case records, the number of days from one segment of the process to the next were calculated, i.e. from the onset of the illness or injury to the initiation of the medical board. The following day was considered day 1 of that *segment*.

The start date of the MEBD processing time was the date of the attending physician's decision to initiate a MEBD. The total MEBD processing time was defined as the initiation date of the medical board to the date the service member concurred with the PEB findings. Processing time at PEBLO was further subdivided into: (a) time for counseling and awaiting of member's election; (b) time for addenda, appeals, or rebuttal; (c) time awaiting for personnel data, in addition to the usual processing time; and (d) total PEBLO processing time.

## Physical Disability Process

42

Name of Patient \_\_\_\_\_ SSN \_\_\_\_\_ Age \_\_\_\_\_ Sex \_\_\_\_\_ Race \_\_\_\_\_  
 Marital Status \_\_\_\_\_ Rank \_\_\_\_\_ Service \_\_\_\_\_ Years AD \_\_\_\_\_ MOS \_\_\_\_\_

Diagnoses: Primary \_\_\_\_\_

Secondary \_\_\_\_\_

--	--	--	--	--	--	--	--	--	--	--

Comments _____	Pre-Board _____
_____	Initiate-SF 88 _____
_____	SF 88-SF 502 _____
_____	SF502-DA 3947 _____
_____	DA 3947-PEBLO _____
_____	PEBLO _____
_____	DCCS _____
_____	Appeals _____
_____	Addendum _____
_____	Personnel _____
_____	Other delays _____
_____	PEB _____
_____	TOTAL _____

Figure 15. Medical Evaluation Board Study Sheet



For the most part, distinct time segments were discernible from the records reviewed. These segments were identified as follows:

T<sub>0</sub> = Pre-board phase: from onset of signs and symptoms of an illness or date of an injury to the initiation of the MEBD. This phase includes the diagnostic work-up, treatment regimen, operative procedures, and/or hospitalization of the member.

T<sub>1</sub> = Initiation of MEBD: from the attending or primary physician's decision to initiate MEBD to the completion of the medical report, SF 93 and physical examination report, SF 88.

T<sub>2</sub> = Physical examination: from completion of the physical examination to the dictation of the narrative summary, SF 502.

T<sub>3</sub> = Narrative Summary report: from dictation of the narrative summary, SF 502, to the start of the MEBD.

T<sub>4</sub> = MEBD segment: from start of MEBD to receipt of MEBD findings and other documents by PEBLO

T<sub>5</sub> = PEBLO segment: starts with the receipt of MEBD findings, DA 3947. This segment includes notification and counseling of the member, awaiting for personnel data and addenda requested by the member.

T<sub>6</sub> = DCCS segment: review and approval of MEBD findings to receipt of documents by PEBLO.

T<sub>7</sub> = PEB: includes both informal and formal hearings

$T_e$  = MEBD processing time plus PEB time

$T_e$  = Total MEBD processing time at MTF

Operational Definitions. The independent variables are the time segments listed above,  $T_0$  to  $T_7$ . The dependent variable is the total MEBD processing time,  $T_e$ . Although the pre-medical board phase,  $T_0$ , is not technically a part of the total processing time, it is included to analyze its correlation with the total MEBD processing time,  $T_e$ .

Working Hypothesis.

Null Hypothesis: The total MEBD processing time is not directly related to one or more of the time segments,  $T_0$  to  $T_7$ .

$H_0: Y = f(T_i) \text{ where } i = (0..7)$

Alternate Hypothesis: The total MEBD processing time is directly related to one or more of the time segments.

$H_a: Y = f(T_i) \text{ where } i = (0..7)$

Statistical Methods

For data analysis, Pearson product-moment correlation, using the correlation matrix on Microstat, was used to measure the relationship and predictive value of each of the different time segments of the MEBD processing time upon the dependent variable of the total MEBD processing time. A  $t$  test was used to test the significance of each hypothesis, using an alpha level of 0.05.

### III. Results

#### Raw Data

Data collected from the study are shown on Table 1, pages 46-51.

#### Demographic Data

Demographic data collected from the 46 physical disability case records is shown in Table 2. Of the 46 cases, the ages of service members ranged from 18-54 years, with a mean age of 31.02 years. There was a predominance of male service members in the group, 80.4% (n=37). Females accounted for 17.4% (n=8), with one member whose sex was not specified in the records. Fifty percent (n=23) of the cases were Caucasians, 17% (n=8) were Hispanics, 13% (n=6) were Blacks, and 2% (n=1) was of Asian heritage. In 17% of the cases, race was not specified from the available records. Twenty-two (74.8%) of the members in the group were married, 13 (28.3%) were single. The majority of the cases, 93.5% (n=42) were enlisted personnel; 13 (28.2%) holding a rank of E-4. There were three officers (6.5%) and one (2.2%) warrant officer in the group. The average length of active duty service was 9.1 years, with a range of 0.08-31.5 years.

Table 1. Raw data from MEBD study

Case no	Age	Sex	Race	Marital	Rank	Service	Years
1	24	M	C	S	E-2	A	0.66
2	28	M	B	M	O-3	?	6
3	21	M	B	S	PO-3	N	?
4	?	M	?	?	E-1	A	0.33
5	25	M	A	S	E-4	A	2.58
6	40	M	C	M	E-7	A	20.92
7	31	M	C	M	E-4	A	6.33
8	43	M	C	M	E-5	AR	
9	26	M	C	M	E-4	A	2
10	37	M	C	M	E-7	A	16.42
11	19	F	C	M	E-2	A	0.75
12	31	M	H	M	E-6	A	10.42
13	41	M	B	S	E-7	NG	19
14	36	M	C	M	E-4	A	4.75
15	27	M	?	S	E-4	A	4
16	47	M	C	M	E-7	A	21.08
17	43	M	?	M	O-4	A	26.42
18	28	M	C	M	E-5	A	9.5
19	21	M	C	S	E-2	A	0.92
20	18	M	H	S	E-1	A	0.25
21	39	F	B	S	E-6	A	12.25
22	?	F	?	?	E-1	A	0.17
23	26	M	H	M	E-6	A	9.5
24	23	M	H	S	E-1	A	0.08
25	?	?	?	?	E-1	A	0.25
26	33	M	C	?	E-6	A	9.83
27	?	F	?	?	E-4	NG	
28	27	M	H	M	E-6	A	8.33
29	38	M	B	M	E-6	AF	15.08
30	48	M	W	M	CW2	A	23
31	29	M	H	M	E-4	A	6
32	30	M	C	M	E-6	A	12
33	36	M	C	M	CPO	N	18
34	22	F	B	?	E-5	A	4.75
35	21	M	C	S	E-3	AF	1.83
36	26	M	C	S	E-4	A	3.5
37	38	M	C	M	E-7	A	20.17
38	22	M	H	S	E-4	A	3.83
39		M	C	M	E-9	A	28
40	42	M	C	M	E-6	A	21.33
41	25	F	C	S	E-4	A	2
42	24	M	H	?	E-4	A	3.17
43	?	F	?	?	E-1	A	0.33
44	21	M	C	?	E-4	A	4

Physical Disability Processss  
47

45	?	F	?	?	E-1	A	0.17
46	54	M	C	M	O-6	A	31.5
	1210						391.4
	26.88888						8.895454
	0						0
	54						31.5
	13.46637						8.845895

Physical Disability Processss  
48

(Raw data continued)

To	T1	T2	T3	T4	T5a	T5b
60	8	0	0	0	4	0
570	7	0	0	0	12	26
210	6	0	7	0	2	0
365	6	0	0	1	0	0
730	16	4	6	1	26	0
730	27	51	0	14	15	5
730	26	0	0	0	2	0
180	39	10	7	0	3	0
600	56	4	0	1	2	0
300	61	0	1	5	10	0
48	0	8	2	7	4	0
2555	0	7	0	7	10	0
390	0	9	3	1	13	0
53	0	37	24	1	12	44
180	0	55	14	13	2	0
730	164	4	0	3	1	0
730	13	0	0	11	23	0
21	29	0	1	0	15	0
120	0	83	1	1	5	0
34	7	0	0	1	4	0
730	35	0	16	0	0	0
390	0	0	1	1	1	0
75	8	0	0	2	3	0
270	9	21	11	0	14	5
990	1	0	0	2	0	0
730	84	2	22	1	10	0
?	0	0	0	2	3	0
120	0	16	0	0	1	0
45	0	49	4	0	4	29
475	35	43	12	2	8	0
365	0	4	6	1	5	0
2555	0	1	0	9	6	0
150	0	0	1	0	1	0
120	0	1	13	1	12	0
270	0	9	0	0	1	0
?	0	7	7	1	8	0
548	14	0	6	0	4	0
730	0	2	8	5	9	0
2920	0	181	1	1	1	0
365	9	8	4	1	19	60
3650	0	0	7	0	8	0
70	87	33	0	1	11	0
?	0	0	3	3	0	0

## Physical Disability Process

49

27	10	9	1	0	3	0
365	0	0	0	10	0	0
51	7	7	3	1	9	13
25347	764	665	192	111	306	182
551.0217	16.60869	14.45652	4.173913	2.413043	6.652173	3.956521
0	0	0	0	0	0	0
3650	164	181	24	14	26	60
789.4139	30.62286	30.84301	5.865538	3.602994	6.21435	11.93452

"REPRODUCED AT GOVERNMENT EXPENSE"

Physical Disability Processs  
50

(Raw data continued)

T5c	T5c	T5-Total	T6	T7	T8	T8
0	0	4	5	3	20	17
0	0	38	2	8	55	47
0	0	2	1	0	16	16
0	0	0	2	0	9	9
15	46	87	1	7	122	115
0	0	20	0	30	142	112
0	0	2	5	7	40	33
0	0	3	1	19	109	90
0	0	2	1	6	70	64
0	0	10	2	3	82	79
0	0	4	1	15	37	22
0	0	10	4	4	32	28
0	0	13	6	15	47	32
0	0	56	1	1	120	119
0	0	2	1	15	100	85
0	13	14	1	7	193	186
0	0	23	4	19	70	51
0	0	15	1	3	49	46
32	0	37	1	5	128	123
0	13	17	2	7	34	27
0	0	0	3	2	56	54
0	0	1	4	0	7	7
28	0	31	4	5	50	45
0	0	19	1	0	61	61
0	0	0	4	0	7	7
0	0	10	3	13	135	122
0	0	3	1	0	6	6
0	0	1	1	4	22	18
0	0	33	8	0	94	94
0	0	8	1	4	105	101
20	0	25	1	6	43	37
0	0	6	2	6	24	18
0	0	1	1	0	3	3
29	0	41	1	2	59	57
0	0	1	1	0	11	11
43	0	51	1	4	71	67
0	0	4	1	5	30	25
0	0	9	2	4	30	26
21	0	22	1	7	213	206
0	0	79	1	9	111	102
89	0	97	1	0	105	105
0	12	23	1	2	147	145
0	0	0	1	0	7	7



Physical Disability Processss  
51

0	24	27	4	5	56	51
0	0	0	2	0	12	12
15	0	37	1	3	59	56
292	108	888	94	255	2999	2744
6.347826	2.347826	19.30434	2.043478	5.543478	65.19565	59.65217
0	0	0	0	0	3	3
89	46	97	8	30	213	206
16.05455	7.967917	23.2331	1.65446	6.219557	50.55286	48.45805

**Table 2.** Demographic data from forty-six medical evaluation board cases at JMMC-BAMC, FY 1989.

1. Age:	Mean	=	31.02 years
	Range	=	18 - 54 years
2. Sex:	Females	=	8 (17.4%)
	Males	=	37 (80.4%)
	Not specified	=	1 (2.2%)
3. Race:	Caucasians	=	23 (50%)
	Hispanics	=	8 (17%)
	Blacks	=	6 (13%)
	Asians	=	1 (2.2%)
	Not specified	=	8 (17%)
4. Marital Status			
	Married	=	22 (47.8%)
	Single	=	13 (28.3%)
	Not specified	=	11 (23.9%)
5. Rank:	Enlisted	=	42 (93.5%)
	E-1	=	7 (15.2%)
	E-2	=	3 (6.5%)
	E-3	=	1 (2.2%)
	E-4	=	13 (28.2%)
	E-5	=	3 (6.5%)
	E-6	=	8 (17.4%)
	E-7	=	6 (13%)
	E-9	=	1 (2.2%)
	Warrant Officer		
	CW-2	=	1 (2.2%)
	Commissioned	=	3 (6.5%)
	O-3	=	1 (2.2%)
	O-4	=	1 (2.2%)
	O-6	=	1 (2.2%)
6. Years of Active duty:			
	Mean	=	9.1 years
	Range	=	0.08 - 31.5 years

The primary military occupational specialties varied and are shown on Table 3. Table 4 lists all the primary diagnoses. Table 5 lists the diagnoses of members whose illness or physical disability existed prior to service.

#### Descriptive Data

Table 6 presents the means, minimums, maximums and standard deviations of all the MEBD processing time segments. Although not technically part of the total MEBD process time, data from Table 6 confirms that the longest and the most variable time period is the pre-board phase, T<sub>0</sub>, having a mean of 551.2 days, a range of 0 to 3650 days, and a standard deviation of 789.4 days. The MEBD time segment that averaged the least number of days was T<sub>8</sub>, DCCS time segment. The average total MEBD processing time at JMMC-BAMC was 59.6 days, with a range of 3 to 206 days, and a standard deviation of 48.4 days.

Three time segments accounted for the majority (84.2%) of total MEBD processing time, T<sub>1</sub> (from the initiation of MEBD to completion of the physical examination, T<sub>2</sub> (from completion of the physical examination to dictation of the narrative summary, and T<sub>5</sub>, (total PEBLO time segment). Each segment, T<sub>1</sub>, T<sub>2</sub> and T<sub>5</sub>, accounted for 27.8%, 24.2%, and 32.2% respectively of the total MEBD

**Table 3. Primary Military Occupational Specialty (PMOS)**

1.	11C10	Motor Armor Track
2.	13A00	Field Artillery Officer
3.	?	
4.	91P	Radiology Technician
5.	76Y10	Unit Supply Clerk
6.	75Z40	Personnel Sergeant
7.	91A10	Combat Medic
8.	62B20	Construction Equipment Repair
9.	94B10	Cook
10.	63T40	CFV Maintenance Supervisor
11.	95B10	Military Police
12.	98G2L	Voice Transcriber
13.	91D4H	Operating Room Technician (Instructor)
14.	63E10	M60 Tank Mechanic
15.	88L10	Water Marine Engineer
16.	79D4R	Reenlistment NCO
17.	13A00	Field Artillery Officer
18.	29M20	Tat SAC MW Repairer
19.	91A00	Combat Medic (AIT)
20.	76P	Supply (Material Control NCO)
21.	91C30	Practical Nurse
22.	91A	Combat Medic (AIT)
23.	13B30	Section Chief
24.	?	

25.	91A	Combat Medic (AIT)
26.	72E3P	Cryptomaterial NCO
27.	91A	Combat Medic (AIT)
28.	19E30	Tank Commander (NCO)
29.	52E30	NCOIC Power production
30.	63030	Operations Officer
31.	11B	Infantryman (AIT)
32.	91C30	Practical Nurse
33.	67H10	Aviation Machinist Mate
34.	94B20	Food Service Specialist
35.	63B10	Mechanic (Wheeled Vehicle)
36.	31C10	Single Channel Radio operator
37.	94B40	Food Service Sergeant
38.	75B10	Unit Clerk
39.	00R50	Reenlistment Officer
40.	13B30	Cannon Crewman
41.	94F10	Nutrition Care Specialist
42.	31V10	TCS Operator
43.	76J	Supply Specialist (AIT)
44.	?	
45.	91J	Physical Therapy Specialist (AIT)
46.	67H	Team Chief, Health Services, Plans, Operations, Intelligence & Training Officer

Table 4. PRIMARY DIAGNOSES

1. Closed head injury with basilar skull fracture manifested by bilateral 6,7,9,10th, 11th, 12th Cranial nerves palsy as well as spastic quadriparesis involving upper & lower extremities.
2. Severe degenerative lumbar disc disease with residuals of lumbar disc surgery
3. 64.75% total body surface area burns
4. Chondromalacia, bilateral, EPTS
5. Schizophrenia, undifferentiated, subchronic
6. Status post extracapsular cataract extraction w/ intraocular lens transplant
7. Status post laminectomy, mid dorsal myetomy with syringopleural shunt
8. Homonymous heminaopsia secondary to glioblastoma multiforme, Status post partial resection EPTS
9. Renal artery stenosis, complicated by hypertension
10. Low back pain, as residual of a left L5-S1, hemilaminectomy, foraminotomy & partial disectomy for (L) L5-S1 herniated nucleus pulposus

Table 4 (continued)

11. Narcolepsy syndrome w/ excessive daytime sleepiness & history of sleep paralysis
12. Chronic temporo-mandibular joint pain, bilateral, status post surgical repair
13. Atherosclerotic coronary artery disease, manifested by myocardial infarction
14. Right cerebrovascular accident w/ mild residual (L) hemiparesis, stable, etiology unknown
15. Anterior interosseous nerve injury of the (R) dominant hand
16. Spastic paraparesis of lower extremities secondary to peripheral neuropathy
17. Severe post traumatic degenerative joint disease (Osteoarthritis) of left hip
18. Cranio-cerebral trauma w/ left temporal skull fracture, left internal capsule hemorrhage
19. Reflex sympathetic dystrophy, left lower extremity
20. Pilonidal cyst

Table 4 (continued)

21. Stage II gastric adenocarcinoma
22. Chronic low back pain, EPTS
23. Organic Brain syndrome secondary to close head injury with right frontal intracerebral hematoma
24. Bipolar disorder, manic phase, in partial remission, EPTS
25. Status post open reduction internal fixation fracture of right foot, EPTS
26. Diffuse histiocytic lymphoma
27. Subluxing patella, EPTS
28. Viral meningeal encephalitis
29. Atherosclerotic heart disease manifested by one vessel coronary artery disease
30. Atherosclerotic cardiovascular disease with associated hypertension
31. Schizophrenia, undifferentiated type, subchronic
32. Status post fusion L4-5, for spondylolisthesis
33. Atherosclerotic coronary artery disease, Class IB
34. Hodgkin's Lymphoma Stage IIA, nodular sclerosing variety
35. Suprasellar astrocytoma, Grade III, with extension into left temporal lobe



Table 4 (continued)

36. Schizophrenia, undifferentiated, chronic, with acute  
exacerbation
37. Rheumatoid arthritis, Class II
38. Human immunodeficiency virus infection
39. Chronic low back pain
40. Atherosclerotic heart disease, status post Myocardial  
infarction
41. Organic mood disorder, manic, with paranoia and psychosis
42. Meningoencephalitis, viral in etiology
43. Congenital underriding 4th toes, bilateral, EPTS
44. Encephalopathy, as residual of cerebral contusions
45. Spondylolisthesis, L5-S1, EPTS
46. Atherosclerotic peripheral vascular disease manifested by left  
posterior frontal subcortical infarct with minimal residual  
deficit

**Table 5.** Existed Prior to Service Diagnoses

1. Chondromalacia, bilateral
2. Homonymous hemianopsia secondary to glioblastoma  
multiforme
3. Chronic low back pain
4. Bipolar disorder, manic phase, in partial remission
5. Status post open reduction, internal fixation of right foot  
with tarsometatarsal arthritis
6. Subluxing patella
7. Congenital underriding 4th toes, bilateral
8. Spondylolisthesis, L5-S1

Table 6: Descriptive Data of the Time Segments of MEBDs at JMMC-BAMC

	To	T <sub>1</sub>	T <sub>2</sub>	T <sub>3</sub>	T <sub>4</sub>	T <sub>5a</sub>	T <sub>5b</sub>
Total Days	25347	764	665	192	111	306	182
Average	551.02	16.61	14.46	4.17	2.41	6.65	3.96
Minimum	0	0	0	0	0	0	0
Maximum	3650	164	181	24	14	26	60
Standard Deviation	789.41	30.62	30.84	5.87	3.60	6.21	11.93
	T <sub>5c</sub>	T <sub>5d</sub>	T <sub>5Total</sub>	T <sub>6</sub>	T <sub>7</sub>	T <sub>8</sub>	T <sub>9</sub>
Total Day :	292	108	888	94	255	2999	2744
Average	6.35	2.35	19.30	2.04	5.54	65.20	59.65
Minimum	0	0	0	0	0	3	3
Maximum	89	46	97	8	30	213	206
Standard Deviation	16.05	7.96	23.23	1.65	6.22	50.55	48.46

Table 6 (Continued)

LEGEND:	T <sub>0</sub>	=	Pre-medical evaluation board
	T <sub>1</sub>	=	Initiation of MEBD
	T <sub>2</sub>	=	Physical Examination
	T <sub>3</sub>	=	Narrative Summary Report
	T <sub>4</sub>	=	MEBD
	T <sub>5a</sub>	=	PEBLO
	T <sub>5b</sub>	=	PEBLO: Addenda/Appeals
	T <sub>5c</sub>	=	PEBLO: Personnel
	T <sub>5d</sub>	=	PEBLO: Other
	T <sub>5</sub> -Total	=	PEBLO: Total
	T <sub>6</sub>	=	DCCS
	T <sub>7</sub>	=	PEB
	T <sub>8</sub>	=	MEBD + PEB
	T <sub>9</sub>	=	Total MEBD at MTF

processing time. Seven cases (15.2%) requested addenda to their medical records or appealed the findings of either the MEBD or PEB findings or both. The average number of days expended on requesting an addendum or appeal was 26 days. Nine cases (19.6%) were delayed due to lack of personnel data averaging a delay of 32.4 days. Additional delays were found in 5 (10.8%) of the cases.

Table 7 presents the medical or surgical services that processed the MEBD, i.e. Neurosurgery, Troop Medical Clinic (TMC), Internal Medicine, Wilford Hall Air Force Medical Center and others (Institute of Surgical Research, Nephrology, Cardiology, Orthopedics, Oncology, Neurology). The highest number of cases (n=12) were processed from the TMC, representing 26.1% of the total number of cases reviewed. Internal Medicine required the longest (mean = 73.3 days) to process MEBD cases and Neurosurgery required the least number of days (mean = 41.1 days).

Figures 16 and 17 are vertical-bar graphs representing the total MEBD processing time per clinical or surgical service and the average processing time of each service respectively.

#### Statistical Analysis

Table 8 is a correlation matrix using Microstat software. Three MEBD time segments, T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub>-Total correlate well with

the dependent variable of total MEBD processing time,  $T_e$ , having correlation coefficients of 0.56119, 0.63553 and 0.46207 respectively (critical value with 2-tail test,  $p$  of 0.05 = + or - 0.29036). An inverse relationship is shown between  $T_4$  and  $T_e$  time segments and the total MEBD processing time. A  $t$  test was calculated to test the statistical significance of the three correlation coefficients using the formula:

$$t = \frac{r\sqrt{n-2}}{\sqrt{1-r^2}}$$

Calculated  $t$  values for the three time segments  $T_1$ ,  $T_2$  and  $T_5$ -Total are 5.62, 6.98 and 4.17 respectively, all highly significant. The null hypothesis of these three time segments can be rejected since the calculated  $t$  values are greater than the critical values of  $t$  (one-tailed test; degrees of freedom = 44), even beyond an alpha level of 0.0005.

## Physical Disability Process

65

	# OF DAYS NEUROSURG	TMC	WHAFCM	MEDICINE	OTHERS
1	17	9	115	90	16
2	47	112	27	119	64
3	33	28	61	122	32
4	79	186	37	18	94
5	46	123	57	101	85
6	45	7	67	3	51
7	11	7	105	25	54
8	51	6		26	22
9		18		102	
10		206		145	
11		7		56	
12		12			
TOTAL CASES	8	12	7	11	8
TOTAL # DAYS	329	721	469	807	418
AVG	41.12	60.08	67	73.36	52.25
STD	19.87	72.39	30.19	47.04	26.45

**Table 7.** Major Clinical Services processing MEBDs at JMMC-BAMC

Legend: Neurosrg = Neurosurgery  
TMC = Troop Medical Clinic  
WHAFCM = Wilford Hall Air Force Medical Center  
Medicine = Internal Medicine  
Others = Institute of Surgical Research,  
Nephrology, Cardiology,  
Orthopedics, Oncology

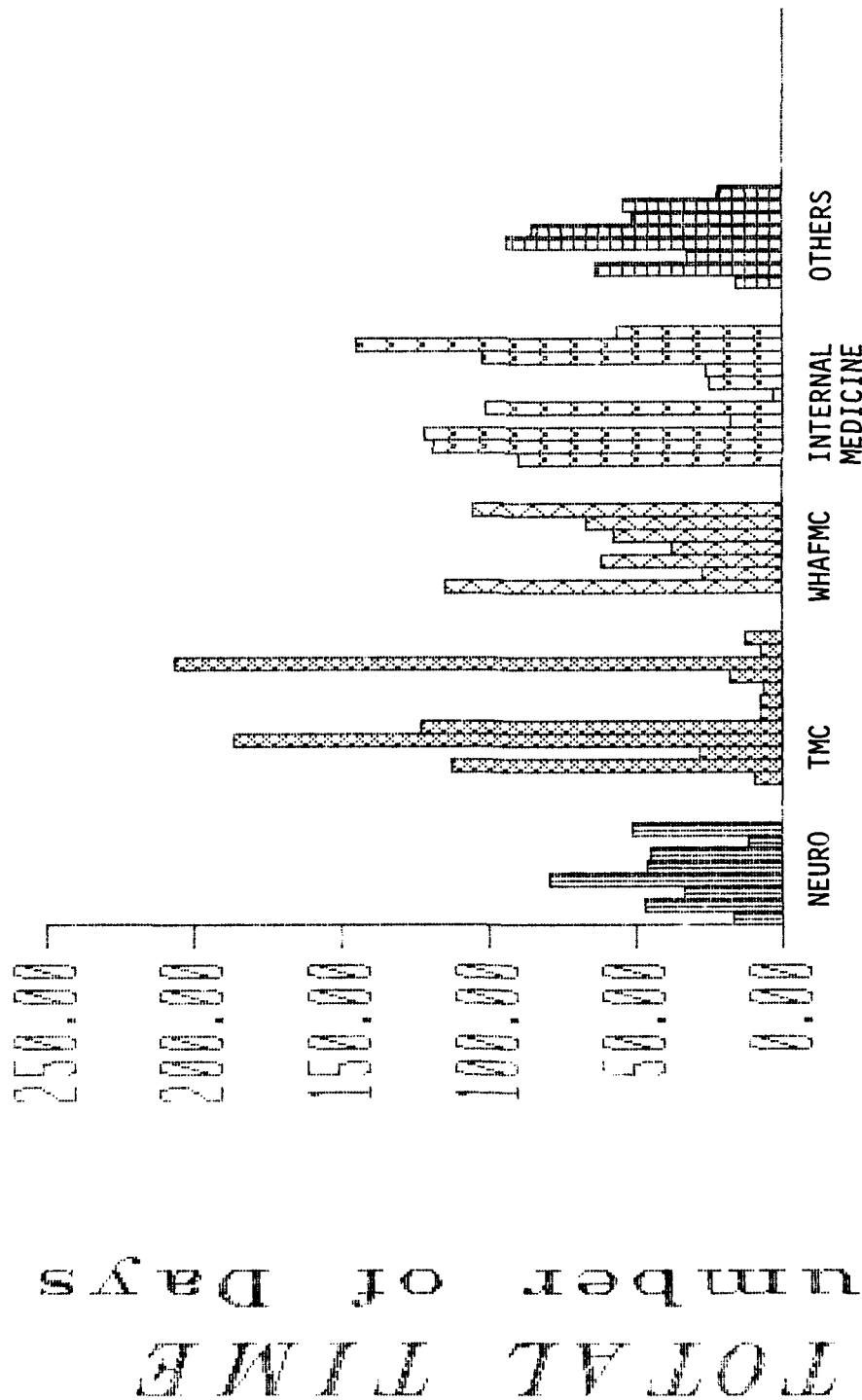
"REPRODUCED AT GOVERNMENT EXPENSE"

Figure 16. Graph of Total MEBD Processing Time  
Per Clinical Service



# MEBD PROCESSING TIME

BAMC



LEGEND: Neuro = Neurosurgery  
TMC = Troop Medical Clinic

WHAFMC = Wilford Hall AF Med Center  
Others = Institute of Surgical Research, Nephrology, Cardiology, Orthopedics, Oncology, Neurology

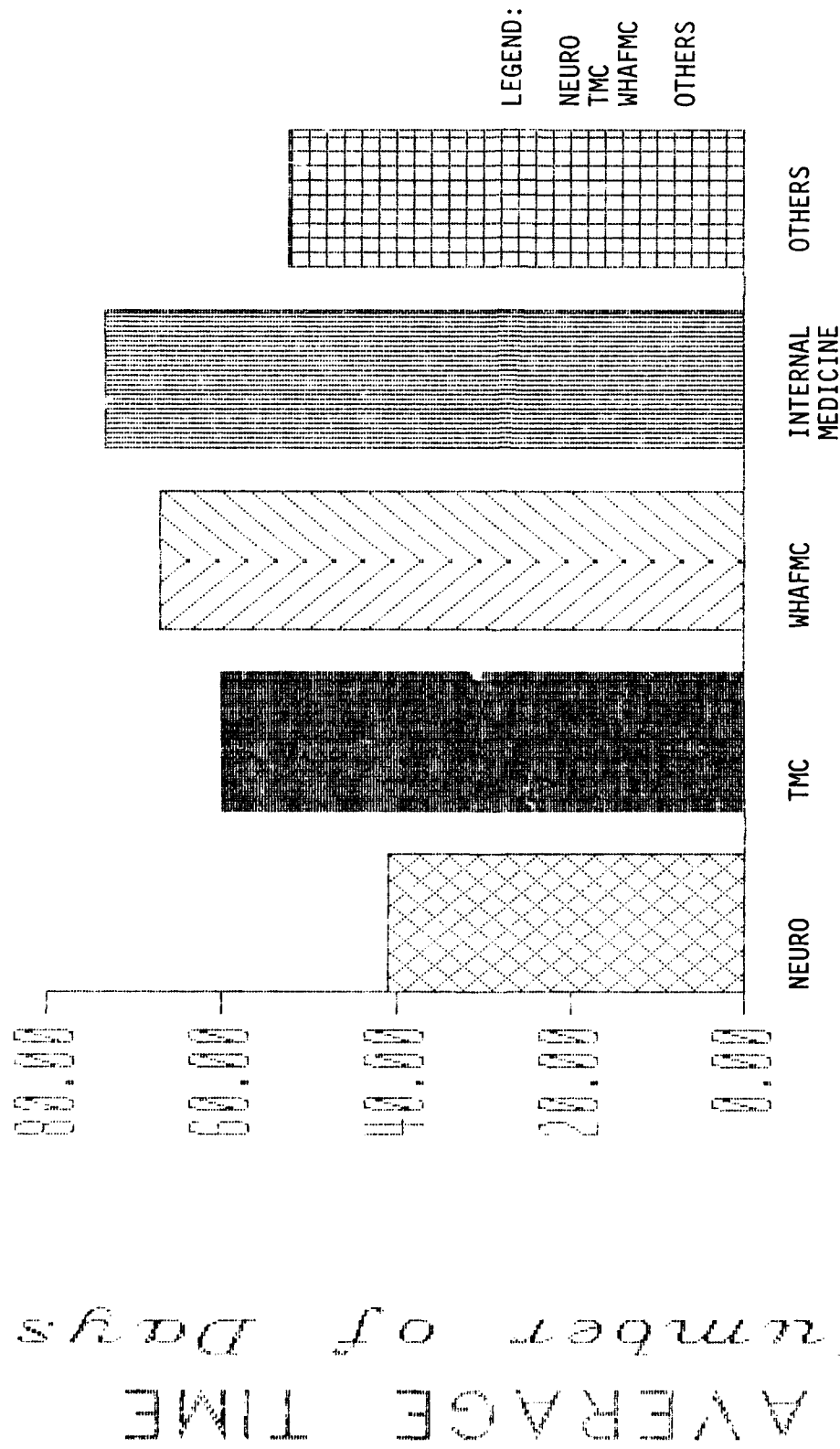
SERVICE / CLINIC

Figure 16 MAJOR CLINICAL SERVICES PROCESSING MEBDs - TOTAL MEBD PROCESSING TIME  
Note: WHAFMC processes psychiatric cases

Figure 17. Graph of Average MEBD Processing Time  
Per Clinical Service

# MEBD PROCESSING TIME

## BAMC

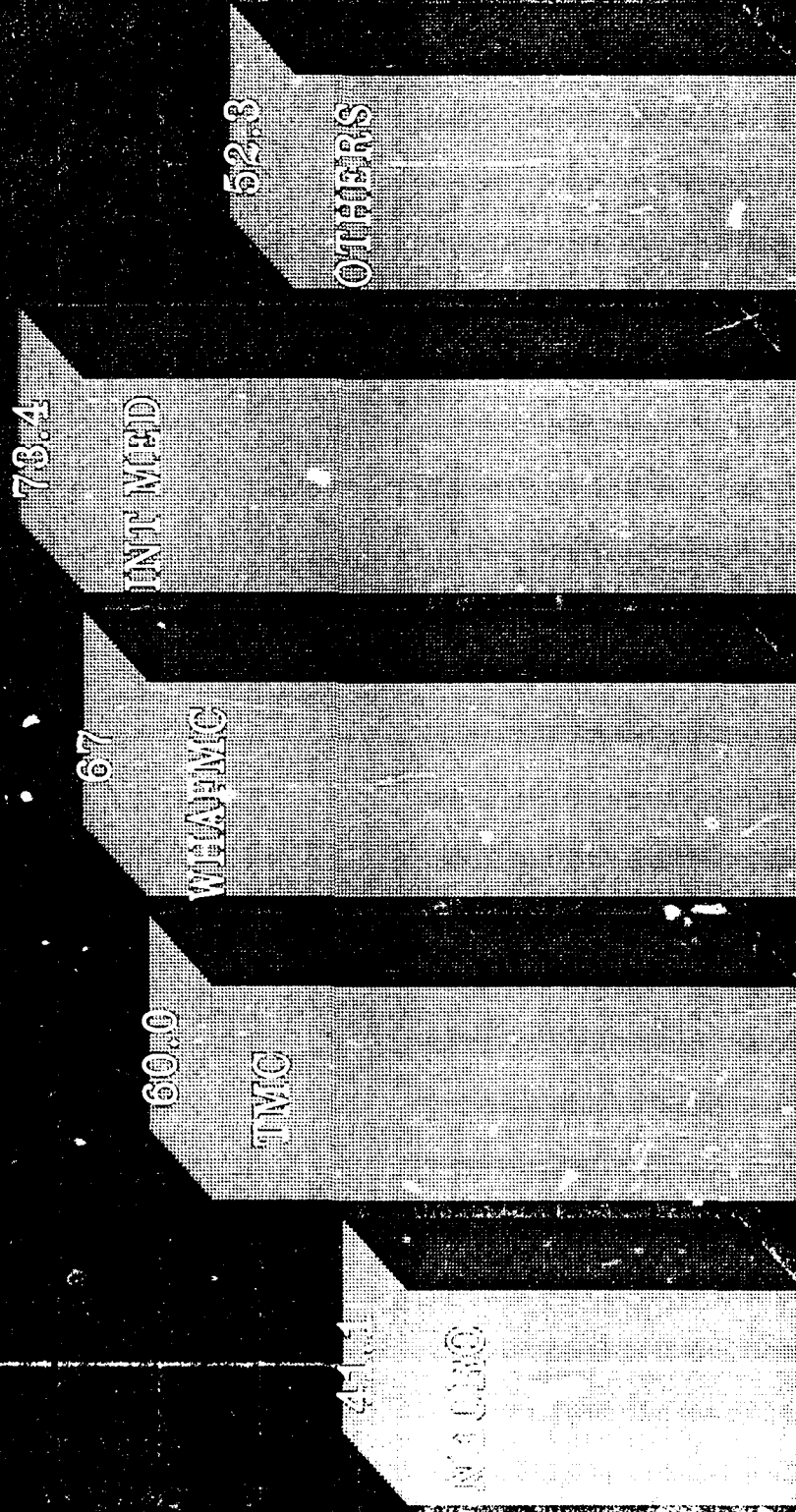


# SERVICE/CLINIC

FIGURE 17. AVERAGE MEBD PROCESSING TIME PER CLINICAL SERVICE

# AVERAGE MEBD PROCESSING TIME

## JMMC-BAMC



NUMBER OF DAYS

Table 8. Correlation Matrix

----- CORRELATION MATRIX -----

HEADER DATA FOR: C:MICRO LABEL: MEB  
 NUMBER OF CASES: 46 NUMBER OF VARIABLES: 13

MEDICAL EVALUATION BOARD SEGMENTS

	<i>Pre-bump</i> T-0	<i>initiate -</i> SF88 T-1	<i>SF88 -</i> S02 T-2	<i>SF502 -</i> DA 3947 T-3	<i>DA 3947 -</i> PEBLD T-4	<i>PEBLD</i> T-5a	<i>Addenda</i> <i>appeals</i> T-5b	<i>PCI sm</i> <i>data</i> T-5c
T-0	1.00000							
T-1	-.02243	1.00000						
T-2	.26765	-.03980	1.00000					
T-3	-.06145	.04349	.05219	1.00000				
T-4	.16805	-.03550	.08340	-.10112	1.00000			
T-5a	.04110	.01996	-.06212	.17641	.16176	1.00000		
T-5b	-.12520	-.12343	.07966	.23178	-.12749	.33629	1.00000	
T-5c	.43508	-.18331	.12340	.09008	-.17799	.07660	-.10896	1.00000
T-5d	-.05019	.21671	-.06310	-.07014	-.11405	.32777	-.09769	.00075
T-5total	.23012	-.11041	.08794	.20444	-.18433	.60557	.49485	.65580
T-6	.00626	-.12204	-.12862	-.14863	-.08324	-.07676	.03753	-.18063
T-7	.02205	.17080	.16711	.00337	.54003	.35811	-.00817	-.14624
T-9	.25199	.56119	.63553	.27601	-.00565	.29031	.22705	.25953
	<i>with</i> T-5d	<i>PEBLD</i> T-5total	<i>OCCS</i> T-6	<i>PEB</i> T-7	<i>T-9 Total</i>			
T-5d	1.00000							
T-5total	.38097	1.00000						
T-6	-.04567	-.14173	1.00000					
T-7	.02163	-.00205	-.05089	1.00000				
T-9	.25790	.46207	-.22243	.27992	1.00000			

CRITICAL VALUE (1-TAIL, .05) = + Or - .24576  
 CRITICAL VALUE (2-tail, .05) = +/- .29036

N = 46

REPRODUCED AT GOVERNMENT EXPENSE

#### IV. Discussion

The first objective of this study was to determine the average total processing time of MEBDs at JMMC-BAMC. The average MEBD processing time was determined to be 59.6 days, almost twice as long as HSC's 30-day standard. The 1988 U.S. AAA audit reported the average MTF processing time of 55 days. Statistics from USAPDA from FY 1986, FY 1987 and FY 1988 showed a total MEBD processing time (including PEBLO time) at all the MTFs of 66.8 days, 67.6 days and 44.6 days respectively.

Results from this study, as well as results from AAA's audit report and statistics from USAPDA, indicate that the total MEBD processing requires more than the established HSC's 30-day standard. How realistic is HSC's established 30-day goal? If MEBD processing time averages more than 58 days, why are MTFs required to complete the MEBDs in 30 days or less? Establishing goals for an organization clarifies to its employees what needs to be done for the purpose of achieving improved motivation and performance (Szilagyi & Wallace, 1987). However, these goals need to be periodically reviewed and adjusted. Goals must be realistic to be achievable. In McFarling's (1988) study, he suspected deliberate

manipulation of the dates to conform to organization's goals. It is evident that HSC needs to review and adjust its 30-day standard accordingly.

The second objective was to determine specific time segments involved in the MEBD process. In its recent audit report, U.S. AAA recommended that the established HSC 30-day goal should be divided into further key segments to obtain performance data and compare with the standard. Comparison of time standards with actual processing time would permit managers to observe which segments of the process are performing above or below the level expected. The comparison would also ensure that the appropriate segments are being included for measurement. Results from this study indicate that specific time segments of the MEBD process can be identified and measured. These segments include the initiation of the MEBD, physical examination, narrative summary, MEBD proceedings, DCCS and PEBLO.

In order to measure a time period, such as the MEBD processing time, a specific start day has to be agreed upon. There has been much controversy in reference to the "start point" of MEBDs. Theoretically, the start point should be the date the physician decides to initiate the MEBD. At one time the date of the physical examination was accepted as the start point. However, in its audit report, the U.S. AAA observed that the date of the Clinical



Record-Narrative Summary (SF 502), rather than the physical examination date (SF 88), was being used as the start date of the 30-day standard. Although McFarling (1988) agreed that the obvious "start point" for measuring MEBD processing time was the physician's decision to initiate the MEBD, he concluded that none of the recorded events would be useful. McFarling concluded that a specific start point for a MEBD process was inadvisable due to the uncertainty of the response to treatment and eventual prognosis. He further pointed out that "a dubious start point would interfere greatly with sound clinical judgment and result both in a decrement in the quality of medical care and in increased loss of potentially salvageable trained personnel from the system."

McFarling confuses the actual MEBD time segments with that of the pre-medical evaluation board phase, To. Response to treatment and eventual prognosis are components of the pre-medical evaluation board phase and therefore should not be included in the MEBD processing time. A MEBD is initiated only if everything possible has been done for the service member and he still does not meet retention criteria.

The third objective of this study was to determine which of the MEBD processing time segments contributed to delays in the MEBD process. Of interest are the three MEBD time segments, T<sub>1</sub>, T<sub>2</sub> and T<sub>5</sub>-Total, that correlated well with the total MEBD processing

time. The total PEBLO time segment, T<sub>3</sub>, accounted for almost 28% of the total MEBD time. Current Army regulations allot 6 days for notifying the service member, counseling and awaiting for his election. The average processing time for PEBLO required 19.3 days. Several cases were delayed due to service members requesting addenda to their narrative summary or rebuttals of the MEBD findings or PEB findings or both. Additional delays were noted in waiting for PERSCOM to submit personnel data to PEBLO. Personnel information may be necessary for some cases to make determinations, such as whether the disease existed prior to service or the injury was combat related. In their audit, AAA (1989) recommended that PEBLO, instead of waiting for personnel records, use other methods to obtain basic information, such as financial records or through use of inquiries from automated personnel databases. Other causes of delays included the inability of the service member or his guardian to understand the procedure, such as the Korean father who could not read English. Still others included missing pages of the necessary documents and the member changing his mind on election.

As previously noted, T<sub>1</sub> and T<sub>2</sub> correlated well with the total MEBD processing. These two segments reflect the attending physician's processing time. These segments can vary depending on a variety of factors. First, the attending physician's knowledge base and experience of processing physical disability cases are

crucial. In general, resident physicians (physicians in residency training programs) or physicians who have been directly commissioned into the military service are less likely to know about the physical disability process. Further, the AMEDD lacks a systematic approach for teaching physicians who are new to the military medical system about the physical disability process. Second, lack of technical or administrative assistance, such as dictation machines or medical transcriptionists, can obviously result in significant delays. Third, low priority in preparing MEBDs, heavy workload, change of duty station of the primary physician can all contribute to delays in processing of MEBDs.

Of the major clinical services processing MEBDs, the greatest number of cases were processed through the TMC. Most of TMC's cases were EPTS medical boards. These boards generally are straightforward and not lengthy. However, the average processing time at the TMC was 60 days. The TMC commander stated that the lengthy processing time may be due service members presenting for a retirement physical who may have several medical problems that need to be evaluated by two or more specialists (COL L. Grabhorn, personal communication, April 18, 1990). As an example, one member with 30 years of active duty had six medical problems. He was sent to six specialists for further evaluation of his medical problems, a process that took approximately six months to accomplish. The

TMC Commander further commented that some of the specialty clinics were referring their cases to the TMC for completion of their outpatient medical boards.

#### V. Conclusions and Recommendations

The results from this study, as well results from U.S. AAA's audit report and data from USAPDA, clearly indicate that HSC needs to consider adjusting its current 30-day standard to a more realistic, actual processing time. As McFarling (1988) pointed out in his study, deliberate manipulation of the dates by employees may be suspect in order to comply with unrealistic goals.

Specific time segments of the MEBD process can be identified and measured. Further studies are needed to gather information on processing times at other military medical centers and Medical Department Activities to establish standards for the time segments. These standards can then be used to compare with actual performance data, thereby allowing managers to observe which segments of the process are performing above or below the expected level. Additionally, a "start point", usually the physician's decision to initiate the MEBD, can be utilized without interfering with sound clinical judgement nor resulting in a decrement of the quality of medical care.

The three MEBD time segments that correlated well with the total MEBD processing time indicate that efforts to shorten processing time should be directed at physicians and PEBLOs. Physicians in training or physicians new to the military service are not familiar with the medical evaluation process. A systematic educational approach for teaching resident physicians and physicians new to the military system about the physical disability process should be initiated by the AMEDD. Courses in physical disability processing should be mandatory in all military residency training programs. Emphasizing the importance of MEBDs and educating physicians on how to properly complete a MEBD should facilitate processing. Adequate technical and administrative support, such as dictating machines and medical transcriptionists, are key in assisting physicians process MEBDs in a timely manner.

As recommended by U.S. AAA, PEBLOs do not have to wait for personnel records to complete processing of the physical disability cases. Personnel information may be gathered from other sources, such as financial records or through the use of inquiries from automated personnel databases. Eliminating the delay secondary to awaiting personnel records can result in reducing the average total MEBD time by 6.3 days.

The three segments, T<sub>1</sub>, T<sub>2</sub> and T<sub>3</sub>-total, account for 50.5 days or 85% of the average total MEBD processing time of 59.6 days. If

efforts were directed at reducing the time in these segments by 30% (15 days), it will equate to approximately \$6.8 million (using FY 1988 personnel costs and benefits and the disability case workload) in savings for the military. In the face of the current military budget difficulties, these savings can be utilized in other areas to enhance AMEDD's ability to provide medical care to its expanding health care beneficiaries.

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APPENDIX A. ABBREVIATIONS

ABCMR	Army Board for Correction of Military Records
ACRB	Army Council of Review Boards
ADRB	Army Disability Review Board
APDAB	Army Physical Disability Appeal Board
ADRRB	Army Disability Rating Review Board
AMEDD	Army Medical Department
AR	Army Regulations
BG	Brigadier General
DA	Department of the Army
DCCS	Deputy Commander for Clinical Services
DD	Department of Defense
DoD	Department of Defense
DRC	Disability Review Council
GAO	General Accounting Office
MEBD	Medical evaluation board
MTF	Medical treatment facility
NARSUM	Narrative Summary
PDES	Physical Disability Evaluation System

PEB	Physical Evaluation Board
PEBLO	Physical Evaluation Board Liaison Officer
PERSCOM	U.S. Total Army Personnel Command
SA	Secretary of the Army
SF	Standard form
U.S. AAA	U.S. Army Audit Agency
USAPDA	U.S. Army Physical Disability Agency
VASRD	Veterans Administration Schedule for Rating Disabilities